

**STATE OF NEW MEXICO
BEFORE THE ENVIRONMENTAL IMPROVEMENT BOARD**

IN THE MATTER OF PROPOSED AMENDMENTS,
20.7.3 – Liquid Waste Disposal and Treatment

No. EIB 12-01 (R)



**NEW MEXICO ENVIRONMENT DEPARTMENT'S CLOSING ARGUMENT,
PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW**

The New Mexico Environment Department (“NMED or Department”) provides the following closing argument on disputed issues, as well as Proposed Findings of Fact and Conclusions of Law to assist the Environmental Improvement Board (“Board”) in its consideration of proposed amendments to the Liquid Waste Disposal and Treatment Rules, 20.7.3 NMAC.

I. CLOSING ARGUMENT

NMED and industry contractors who work in the State of New Mexico provided testimony that, in their experience, most drainfields in this state became larger after the liquid waste regulations were amended in 2005. Transcript, Vol. 1, pp. 31, 77; Vol. 2, pp. 335-6.

Infiltrator Systems, Inc. (“Infiltrator”), a manufacturer of proprietary drainfield products, asserted that the 2005 liquid waste regulation amendments actually resulted in smaller drainfields statewide. Infiltrator introduced exhibits to support this assertion, however, their analysis of drainfield configurations did not include the configurations most commonly used in the State of New Mexico.

Infiltrator also asserted that New Mexico has some of the smallest drainfield sizing requirements in the country, and expressed concern that smaller drainfields in general could pose a risk to public health. The assertion by Infiltrator that conventional drainfields are dangerously small is severely undercut by the fact that they fought for and won a 30% sizing reduction for

proprietary drainfield products such as their chambers in 20.7.3.701.C. This means that drainfields built with their products are on average 30% smaller than a conventional drainfield, in spite of a University of Minnesota study that observed, “The data collected in this study was unable to prove the hypothesis that chambered systems of a similar age as rock-filled systems will use 25% less area than rock-filled systems at 10% significance level. The data shows the opposite with less ponding in rock-filled systems.” (NMED Exhibit 30, page 11).

NMED believes that the current drainfield sizing requirements in New Mexico are more than adequate, and continues to strongly support the proposed repeal of the requirement that six inches of sidewall below the invert of the distribution pipe not be used in calculating the absorption area.

II. PROPOSED FINDINGS OF FACT

1. The Department’s Amended Petition proposing changes to the Liquid Waste Disposal and Treatment regulations, 20.7.3 NMAC (“Rules”) was filed with the Board on May 2, 2012. Request to Amend Petition for EIB 12-01(R).

2. Although certain sections of the rules were amended in 2007 and 2011, the majority of the current Liquid Waste Disposal and Treatment rules have been in effect since 2005. Id.

3. An earlier petition to revise these Rules was withdrawn by the Department to allow for greater stakeholder input. Written Testimony of Dennis McQuillan, pp. 3-4.

4. The Department held 21 public meetings with stakeholders, and received two rounds of written public comment on the proposed amendments, prior to filing the Amended Petition. NMED Exhibit 10, EIB meeting minutes, item #10.

5. The Department carefully considered all stakeholder input, and made numerous changes to the proposed amendments, based on that input. NMED Notice of Intent, Written Testimony of Dennis McQuillan, p. 4.

6. The Board received Notices of Intent from the Department and from Infiltrator Systems, Inc. Transcript, Vol. 1, p.6.

7. The Board received oral testimony from three Department personnel, Dennis McQuillan, Brian Schall, and Tom Brandt, all of whom were found to be credible and competent regarding the subject of their testimony.

8. At the conclusion of the hearing on October 30, 2012, the Hearing Officer closed the evidentiary record except for post hearing submittals to be required from the Department. Transcript Vol. 4, p. 763-764.

20.7.3.2 SCOPE

9. Deletion of the phrase “are designed to receive and do” is proposed to clarify that the regulations apply to systems actually receiving 2,000 gallons per day (gpd) or less of liquid waste, even if the system is capable of receiving a higher daily flow. Transcript, Vol. 1, pp. 18, 77.

20.7.3.7 DEFINITIONS

10. Numerous definitions are proposed to be modified for clarity, and several new terms are proposed to be defined. Written Testimony of Dennis McQuillan, p. 8-11.

20.7.3.201 PROCEDURES; GENERAL REQUIREMENTS

11. 201(A) - Language is proposed to make owners explicitly responsible for making sure that liquid waste systems and excavations for systems do not pose a public safety hazard. Written Testimony of Dennis McQuillan, p.12.

12. 201(B) - Language is proposed to address the distinction between liquid waste systems that have been permitted for construction versus those that have also been constructed and given final approval to operate by NMED. The language proposes to grant final approval to all liquid waste systems that were installed in accordance with a permit approved by NMED prior to July 1, 2012. Id.

13. 201(C) - Language is proposed to address the distinction between liquid waste systems that have been permitted for construction versus those that have also been constructed and given final operational approval by NMED, to clarify “public” sewer systems, and to correct a typographical error. Id.

14. 201(D) - Language is proposed to require that all systems be installed, operated and maintained in accordance with the liquid waste permit and applicable regulations. Id.

15. 201(E) - Language is proposed to clarify when connections to public sewer must be made, and to require that liquid waste systems be properly abandoned within 30 days of connection to public sewer. Id.

16. 201(H) - The requirement that liquid waste systems be designed with a 50% replacement or reserve area is proposed to be deleted. Id.

17. 201(I) - Language is proposed to require treatment of RV waste to primary levels only “if necessary”. Id.

18. 201(K) - Language is proposed to clarify the requirement that existing liquid waste systems comply with previous regulations and to make this paragraph consistent with amendments proposed in Sections 202.D, 401.J and 902.F. Written Testimony of Dennis McQuillan, p. 13.

19. 201(L) - Language is proposed to expand Condition #5 for the imposition of more stringent requirements to allow for the protection of Lakes and other “bodies of water”. Id. See also, Transcript, Vol. 3, pp. 471-472.

20. 201(M) - Language is proposed to clarify that NMED’s letter of determination for stricter standards would be issued within 10 days of receipt of the written request, and that the determination, if granted, would not waive other regulatory requirements. Written Testimony of Dennis McQuillan, p. 13.

21. 201(O) - Section 201.O(1) is proposed to be amended so that estimated actual flow, rather than design flow, may be used to determine permitting jurisdiction. Id.

22. 201(P) - Design flow for a 5-bedroom house is proposed to be reduced to 500 gpd to allow 5-bedroom homes on 1 acre lots, and would allow metered flow on residential systems; several other clarifying changes are also proposed for this section. Written Testimony of Dennis McQuillan, p. 14.

23. 201(Q) - Language is proposed to clarify how septic tank size is calculated when using Table 201.1 for design flow. Id.

20.7.3.202 PROCEDURES; MODIFICATION OF EXISTING SYSTEMS

24. 202(A) - Language is proposed to make this section consistent with the definition of “established on-site liquid waste system” in Section 20.7.3.7.E(6). Id.

25. 202(D) - Language is proposed to replace the provision that existing septic tanks fully meet the requirements of the regulations with language that existing septic tanks be watertight and functioning properly. Id.

26. 202(E) - Language is proposed to clarify the existing requirement that an effluent filter and risers be installed whenever any part of a liquid waste system is modified. Written Testimony of Dennis McQuillan, p. 15.

20.7.3.203 PROCEDURES; CONSTRUCTION, INSPECTIONS AND TESTING

27. 203(B)(1) - The term “contractor” is proposed to be replaced with “installer” for purposes of internal consistency. Id.

28. 203(B)(4) - Language is proposed to allow the proposed new classification of “installer specialist” the privileges of notifying NMED of the time of construction completion, but not requiring coordination with NMED of an inspection time; and being pre-authorized to conduct a self-inspection unless NMED arrives at the site within one hour of the notified inspection time. Id.

20.7.3.301 STANDARDS; LOT SIZE REQUIREMENTS

29. 301(C) - The exclusion of roadways and roadway easements from the acreage that can be applied in a liquid waste permit is proposed to be deleted. Id.

30. 301(F)(old) - The language of existing ‘F’ is proposed to be deleted. Id.

31. 301(F)(new) - A new provision is proposed as 301.F that would allow NMED to map areas of the state where groundwater is not at risk from nitrogen loading from onsite wastewater systems; lot size regulation would not be administered in these areas. Id.

20.7.3.302 STANDARDS; SETBACK REQUIREMENTS

32. 302(A)(4) – Footnote 4 to Table 302.1 is proposed to be amended to read, “**** Plus 2 feet for each additional foot of depth below point of discharge.” The language in the Amended Petition for this footnote is in error. Written Testimony of Dennis McQuillan, p. 16.

33. 302(B) - The term “seasonal high water flow” is proposed to be replaced with “defined bank” for the purposes of field identification. Id.

34. 302(C) - A new Section 302.C is proposed to eliminate the single lot policy which has had burdensome consequences on some property owners and to replace it with setback distances between multiple liquid waste on a single lot such that the overall wastewater loading rate would not exceed 500 gpd/acre. Id. NMED Exhibits 23, 24.

35. 302(D) - A new Section 302.D is proposed to prohibit disposal systems in areas subject to flood irrigation, and to establish a 15 foot setback to flood irrigation areas. Written Testimony of Dennis McQuillan, p. 17.

20.7.3.304 STANDARDS; PROHIBITIONS

36. 304(A) - Section A is proposed to be amended to prohibit the introduction of vehicle and equipment wash water into a liquid waste system. Written Testimony of Dennis McQuillan, p. 17.

37. 304(C) - Language is proposed to prohibit mixing and storage of effluent with any other source of water. Id.

20.7.3.305 STANDARDS; WASTE INTERCEPTORS

38. 305(B) - The requirement that waste interceptors be installed in compliance with local code authority is proposed to be clarified. Id.

39. 305(C) - The reference to interceptor requirements is proposed to be deleted because this is an area of CID/plumbing code jurisdiction. Id.

20.7.3.306 SEPTAGE

40. New language is proposed to require that septage be disposed of only at permitted facilities, and that septage pumpers retain customer invoices and disposal records for three years. Id.

**20.7.3.307 STANDARDS; ABANDONED SEWERS AND ON-SITE LIQUID
WASTE SYSTEMS**

41. 307(A) - The reference to uniform plumbing code is proposed to be replaced with a reference to New Mexico plumbing code. Id.

20.7.3.401 PERMITTING; GENERAL REQUIREMENTS

42. 401(A) - Language is proposed to require that permit fees be paid before construction under an approved permit can proceed. Written Testimony of Dennis McQuillan, p. 18.

43. 401(C) - The reference to Section 904 is no longer necessary and is proposed to be deleted. Id.

44. 401(E) - The term “applicant” is proposed to replace the term “any person” to be consistent with the proposed new definition of “applicant” in Section 20.7.3.7.A(7). Id.

45. 401(J) - Language is proposed to allow unpermitted systems installed or modified prior to February 1, 2002 to be issued a certificate of registration for continued operation, provided that certain critical requirements are met. Id.

46. 401(K) - Language is proposed so that Section 401.K also would apply to liquid waste systems that were illegally modified without a permit on or after February 1, 2002. Id.

47. 401(M) - The term “contractor” is proposed to be replaced with the term “installer” to be consistent with the proposed new definition of “installer”. Id.

48. 401(P) - A new Section 401.P is proposed to allow that only a permittee may request a permit cancellation, and that the request must be made in writing. Id.

49. 401(Q) - A new Section 401.Q is proposed that would allow an installer, upon written notice to both the permittee and to NMED, to withdraw from an approved permit. Id.

20.7.3.402 PERMITTING; CONVENTIONAL TREATMENT AND DISPOSAL SYSTEMS

50. Language is proposed in section 402 to clarify what information shall be required in a liquid waste permit application, versus what information may be required. Written Testimony of Dennis McQuillan, p. 19.

20.7.3.403 PERMITTING; ADVANCED TREATMENT OR ALTERNATIVE DISPOSAL

51. 403(B) - Language is proposed to clarify that both maintenance and sampling contracts are required in a permit application, and that the effective dates of these contracts shall be the day of final permit approval. Id.

52. 403(C) - Language is proposed to create a process and deadline for determination of administrative completeness of a permit application. Id.

20.7.3.404 PERMITTING; SYSTEMS WITH EXPERIMENTAL OR CONDITIONAL APPROVAL

53. References to “systems with conditional approval” are proposed in multiple locations in Section 404 to reflect this approval status used by the WTAC. Id.

54. 404(C)(1) - 404(C) is a proposed new provision that would only allow systems with experimental approval to be installed on lots where a conventional system would be allowed. Id.

55. 404(C)(2) - The term “specified” is proposed to be replaced with “recommended” because the WTAC is an advisory committee that only makes recommendations to the NMED Secretary. Id.

56. 404(C)(4) - The requirement for a sampling contract is proposed be added to Section 404.C(4) so that it is consistent with the amendments proposed for Section 403.B. Id.

20.7.3.405 PERMITTING; VARIANCES

57. 405(B) - Language is proposed to require that notification of a proposed variance be provided to parties who share a public water supply source, in addition to the existing requirement to notify parties who share a private domestic well. Id.

20.7.3.501 DESIGN; LIQUID WASTE TREATMENT UNITS; GENERAL

58. 501(A) - Language is proposed to expand certification by IAPMO, or testing and certification by a licensed PE that IAPMO standards are met, for the designs of all types of treatment units, not just septic tanks. Written Testimony of Dennis McQuillan, pp. 19-20.

59. 501(A)(1) - Language is proposed to reflect the annual recertification process required by 20.7.11.9 NMAC, and to provide that tank approval may be suspended for failure to recertify. Written Testimony of Dennis McQuillan, p. 20.

60. 501(A)(2) - Language is proposed to authorize suspension of approval of advanced treatment units if the manufacturer fails to comply with their approval conditions. Id.

61. 501(B)(2) – Language is proposed to combine the requirements of existing 501(B)(2) with those of 501(H). Id.

62. 501(B)(9) - Language is proposed to require that a professional engineer certify that all requirements are met. Id.

63. 501(B)(10) - Language is proposed to require that access risers be attached to the treatment unit and be water tight. Id.

64. 501(H) – Language is proposed to require that the live load-bearing capacity of riser lids be equal to the live load-bearing capacity of septic tanks. Id.

65. 501(J) – Language is proposed to increase the required strength of concrete used in septic tanks to 4,000 psi at 28 days. Id.

20.7.3.502 DESIGN; CONVENTIONAL TREATMENT UNITS; CONSTRUCTION STANDARDS

66. 502(D) - Language is proposed to substitute the term “extensions” with the term “risers” to reflect industry terminology. Id.

67. 502(D) - Language is proposed to prohibit risers from being made with inappropriate material. Written Testimony of Dennis McQuillan, p. 21.

68. 502(F) - The existing requirement that pipe meet or exceed the SDR 35 standard is proposed to be deleted. Id.

69. 502(H) - Language is proposed to require a handle on effluent filters extending to within six inches of the top of the riser to allow for easy removal and cleaning. Id.

70. 502(J) - Language is proposed to require certification to “current” IAPMO standards. Id.

20.7.3.503 DESIGN; PUMP STATIONS AND EQUIPMENT

71. This section is proposed to be relocated from the existing location in Section 812. Various additional requirements and clarification of requirements are included in the proposed changes to the regulations. Id.

20.7.3.504 DESIGN; BUILDING SEWER

72. It is proposed that this section is be relocated from the existing location in Section 813. Id.

20.7.3.601 DESIGN; ADVANCED TREATMENT SYSTEMS; GENERAL

73. 601(B) - Language is proposed to assure consistency with the statutory and regulatory requirements for WTAC review and NMED approval. Id.

20.7.3.602 DESIGN; SECONDARY TREATMENT STANDARDS

74. 602(A) - The existing reference to a 6 month rolling average of effluent test data is proposed to be deleted. Id.

75. 602(B) - Language is proposed to clarify the site conditions that secondary treatment may be used to overcome. Id.

76. 602(C) - Language is proposed to require that the treatment unit be operated in accordance with the manufacturer's specifications and NMED approval conditions. Id.

20.7.3.603 DESIGN; TERTIARY TREATMENT STANDARDS

77. 603(A) - Language is proposed in Subsection A to replace the term "nutrients" with the term "total nitrogen" because nitrogen is the only nutrient addressed by the regulations. Written Testimony of Dennis McQuillan, p. 22.

78. 603(B) - A new Subsection B is proposed to clarify that a department-approved tertiary treatment system may be installed to overcome the limitation of a small lot, and that the system must be capable of removing total nitrogen to the concentration limit calculated by Subsection C. Id.

79. 603(C) - The existing language requiring a 6-sample rolling average is proposed to be cut and pasted into a new Subsection E. Id.

80. 603(D) - The existing language of Subsection D is no longer necessary with the proposed amendment to Subsection B. Language is proposed for a new Subsection D which would require that the treatment unit be operated in accordance with the manufacturer's specifications and with NMED approval conditions. Id.

81. 603(E) - A new Subsection E is proposed that would address situations when effluent monitoring is required, and incorporate existing language regarding compliance with a 6-sample rolling average. Id.

20.7.3.604 DESIGN; DISINFECTION TREATMENT STANDARDS

82. 604(A) - Language is proposed to make the bacteriological test parameter, and allowable concentration, consistent with modern laboratory practices. Written Testimony of Dennis McQuillan, p. 23.

20.7.3.605 DESIGN; MINIMUM REQUIRED TREATMENT LEVELS FOR SITE CONDITIONS

83. 605(B) - Language is proposed to be consistent with the proposed removal of gravel from Section 703.F. Id.

84. 605(D)(3) - The term “naturally occurring” is proposed to be deleted. Id.

85. 605(E) - A proposed new Section 605.E sets out specific treatment requirements for greater than and less than 50 feet and requires a variance for all applications where the setback is less than 50 feet. Id.

86. 605(G) - Language is proposed to add elevated systems, sand-lined trenches and bottomless sand filters to the options that may be used to overcome insufficient clearance. Id.

87. 605(H) - Language is proposed to provide more flexibility in situations where the existing groundwater nitrate-N level exceeds 5 mg/L, and to clarify that the 5 mg/L applies to nitrate measured as nitrogen (nitrate-N) rather than to nitrate measured as nitrate. Id.

20.7.3.701 DESIGN; CONVENTIONAL DISPOSAL FIELD; DESIGN AND CONSTRUCTION

88. 701(A) and (B) - Two new Subsections are proposed to summarize design standards for disposal trenches and disposal beds in one location. Id.

89. 701(C) - The term “systems” is proposed to be replaced with the term “disposal trenches and absorption beds”. Id.

90. 701(H) - Language is proposed requiring access to the distribution box at the ground surface. Written Testimony of Dennis McQuillan, p. 24.

91. 701(H)(3) - Language is proposed to provide for direct connections between a septic tank and drainfield, without a distribution box, and to allow appropriate bedding material other than compacted fill. Id.

92. 701(J) - The maximum length of a disposal field is proposed to be increased from 155 feet to 160 feet, and The maximum trench depth of 6 feet is proposed to be deleted. Id.

93. 701(K) - The term “leaching” is proposed to be replaced with the term “absorption” to reflect standard industry terminology. Id.

94. 701(M) - A new Subsection M is proposed to set standards for soil replacement situations. Id.

95. 701(N) - A new Subsection N is proposed to protect drainfields from being covered with material that may inhibit evaporation of effluent, and from being subject to compaction from being driven over. Id.

96. 701 Footnote – The 701 footnote is proposed to be amended to update the citations to ASTM standards. Id.

20.7.3.702 DESIGN; SEEPAGE PIT; DESIGN AND CONSTRUCTION

97. 702(C) - Language is proposed to clarify that seepage pits are deeper than they are wide, so as not to be confused with trenches and beds. Id.

98. 702(G) - Language is proposed to require that the arch, dome or cover of any seepage pit shall have a minimum compressive strength of 3500 pounds per square inch, and be certified by a professional engineer. Id.

99. 702(K) - Language is proposed to require a 6 inch layer of bentonite clay, or alternative material approved by NMED, at the bottom of the seepage pit to restrict vertical flow through the bottom area of the pit. Id.

20.7.3.703 DESIGN; AREA OF DISPOSAL FIELD AND SEEPAGE PITS

100. 703(F) - The prohibition against constructing drainfields in gravel is proposed to be deleted, and soil with up to 30% gravel is proposed to be added to Table 703.1. Written Testimony of Dennis McQuillan, p. 25.

101. 703(I) - Language is proposed that would allow NMED to map areas where soils that contain more than 30% gravel do not pose a threat of groundwater contamination and to allow drainfields in those areas. Id.

102. 703(J) – It is proposed that some of the material in this existing Subsection be moved into the new Section 701.A. Additionally, the requirement that 6 inches of aggregate be placed below the invert of the distribution pipe, and the exclusion of this 6 inches from calculated absorption area, are proposed to be deleted. Id.

103. 703(M) - the requirement that drainfields for secondary and tertiary treated effluent be no deeper than 10 feet is proposed to be removed. Written Testimony of Dennis McQuillan, p. 26.

20.7.3.801 DESIGN; ALTERNATIVE DISPOSAL (Old)

104. It is proposed that this Section be deleted. Id.

20.7.3.801 PRIVIES AND VAULTS (New)

105. Language is proposed to add a reference to vaults, which are defined in Section 20.7.3.7.V(1), and to remove the prohibition against the installation of privies on lots smaller than 0.75 acre. Id.

20.7.3.803 COMPOSTING AND INCINERATING TOILETS

106. 803(A) - The reference to ANSI and NSF Standards is proposed to be deleted. Id.

107. 803(C) - The prohibition against installing composting/incinerating toilets on lots less than 0.75 acre is proposed to be deleted. Id.

20.7.3.804 IRRIGATION/REUSE SYSTEMS

108. 804(K) - A new section is proposed to require that proprietary drip systems be designed and installed according to manufacturers' specifications. Id.

109. 804(L) - A new section is proposed to require that a permitted and approved disposal system be in place for times (such as winter) when irrigation is not performed. Written Testimony of Dennis McQuillan, p. 27.

20.7.3.805 EVAPOTRANSPIRATION SYSTEMS

110. 805(A) - The requirement that effluent discharged to an ET bed shall not exceed 200 mg/L BOD is proposed to be deleted. Id.

111. 805(G) - A requirement for a grain size analysis is proposed to ensure that the soil used is properly sized. Id.

20.7.3.806 MOUND AND ELEVATED SYSTEMS

112. 806(H) - A requirement for a grain size analysis is proposed to ensure that the soil used is properly sized. Id.

20.7.3.807 LOW PRESSURE DISPOSAL SYSTEMS

113. Amendments to this section are proposed to reflect the guidelines that were established by the Wastewater Technical Advisory Committee. Id.

20.7.3.808 HOLDING TANK REQUIREMENTS

114. Language is proposed in Sections 808.B, C and E(4) to remove permitting of holding tanks receiving RV waste from the variance process. Clarifying language, that does not affect the substance of the regulation is proposed for Sections 808.I and O. Id.

20.7.3.810 GRAYWATER SYSTEMS

115. The term “liquid waste” is proposed to be added to Sections 810.C(1) and C(2). Id.

20.7.3.811 BUILDING SEWER (Old)

116. It is proposed that language in this Subsection be moved to a new Subsection 504. Written Testimony of Dennis McQuillan, p. 28.

20.7.3.812 PUMP STATIONS AND EQUIPMENT (Old)

117. It is proposed that language in this Subsection be moved to a new Subsection 503. Id.

20.7.3.811 SPLIT FLOW SYSTEMS (New)

118. Language is proposed that would codify long-standing NMED practices on how split flow systems are designed. Id.

20.7.3.812 SAND-LINED TRENCHES AND BOTTOMLESS SAND FILTERS (New)

119. The proposed new Section 812 would establish design criteria for sand-lined trenches and bottomless sand filters. Id.

20.7.3.901 MONITORING

120. 901(A) - Amendments are proposed to require owners to allow maintenance personnel right of entry to allow for maintenance, system monitoring, effluent sampling or system evaluation. Id.

121. 901(B) – 901(I) – Amendments are proposed to make the effluent monitoring requirements less burdensome by allowing greater use of field instruments. Id.

122. 901(B)(2) – This paragraph is proposed to be modified from the amended petition to read as follows:

“Parameters should be measured at locations within the treatment unit that will demonstrate the effectiveness of treatment.” Id.

123. 901(C) – This Subsection is proposed to be modified from the amended petition to read as follows, while keeping paragraphs 1-4 the same as proposed:

“Effluent sampling shall be required for on-site liquid waste systems that do not conform to manufacturer guidelines for field parameters pursuant to 20.7.3.901.B NMAC, for systems where the manufacturer has not established guidelines for field parameters, or for systems that the department has determined are not operating properly. Sampling shall be conducted annually, or as otherwise required by the department.” Id.

20.7.3.902 OPERATION AND MAINTENANCE REQUIREMENTS AND EVALUATION AND INSPECTION REQUIREMENTS AT TIME OF TRANSFER

124. The terms “inspection” and “inspected” are proposed to be replaced with “evaluation” and “evaluated” in the context of property transfers throughout Section 902. Written Testimony of Dennis McQuillan, p. 29.

125. 902(C) - Language is proposed to provide for advanced treatment of high strength waste. Id.

126. 902(E) - Language is proposed to require that all established liquid waste systems would be subject to property transfer evaluations, as opposed to only permitted systems. Id.

127. 902(F) – A new Subsection is proposed which lists the criteria, identical to the criteria in Section 401.J, for registering unpermitted systems, whereby established liquid waste systems would pass a property transfer evaluation. Id.

128. 902(G)(3) - Language is proposed to require that property transfer evaluators provide prior notice to maintenance service providers of advanced treatments systems in order to prevent disruption or damage to the system during the evaluation. Id.

129. 902(H) - Language is proposed to clarify who is required to submit an application, if necessary, after an evaluation identifies the need for a permit or variance. Id.

130. 902(I) - A new Subsection is proposed to codify existing NMED policy that a property transfer evaluation is not required if a final permit inspection of new or modified system has been conducted within the prior 180 days. Id.

131. 902(J) - Language is proposed to clarify that, if transfer of property with an existing permitted failed system takes place without remediation, the transferee becomes responsible for remedying the system. Id.

20.7.3.903 MAINTENANCE SERVICE PROVIDERS (MSP) FOR CONVENTIONAL AND ADVANCED ON-SITE LIQUID WASTE SYSTEMS

132. 903(A) - The requirement for NAWT certification is proposed to be deleted. Id.

133. 903(A)(1) - Language is proposed that would require that the system be inspected, operated and maintained in accordance with the liquid waste permit. Id.

134. 903(B) - Language is proposed to codify the existing requirement that MSP personnel have a valid and appropriate CID license when required for specific activities. Written Testimony of Dennis McQuillan, pp. 29-30.

135. 903(H) - The existing MSP requirements for reasonable response time, appropriate equipment, and parts inventory are proposed to be deleted. Written Testimony of Dennis McQuillan, p. 30.

20.7.3.904 REQUIREMENTS FOR QUALIFICATION

136. 904(B)(1) - Language is proposed to allow third parties to evaluate unpermitted systems installed prior to February 1, 2002. Id.

137. 904(B)(2)(b) - Language is proposed to eliminate the reference to the professional engineer specialty sub discipline of on-site wastewater engineering since no PE's have been certified as such. The language is proposed to be replaced with PE disciplines of civil, environmental, or mechanical engineering. Id.

138. 904(C)(3) - This paragraph is proposed to be moved and edited into the specific MSP regulation, Section 903. Id.

139. 904(D) - Two additional requirements for septage pumpers are proposed: spill contingency plan, equipment and supplies; and notification to NMED of disposal facilities used along with copies of permits or licenses issued by the disposal facility. Id.

140. 904(E) - A new classification of "Installer Specialist" is proposed. Id., Tr. Vol. 1, line 20.

III. PROPOSED CONCLUSIONS OF LAW

1. Public Notice of the hearing was timely published as required in the Rulemaking Procedures.

2. The proposed amendments are within the scope set forth in the public notice, or are a “logical outgrowth” of the proposed rule. *Small refiner Lead Phase-Down Task Force v. United States EPA*, 705 F.2d 506 (D.C. Cir. 1983).

3. The hearing in this matter was conducted in accordance with the Board’s Rulemaking Procedures, 20.1.1 NMAC, and NMSA 1978, § 74-1-9.

4. All persons wishing to provide testimony or public comment as provided by the Rulemaking Procedures were afforded the opportunity to do so.

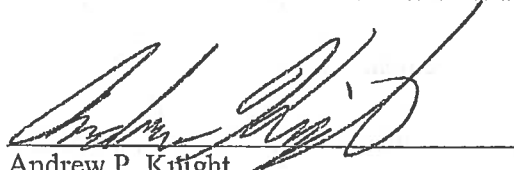
5. Adoption of the amendments proposed by the Department is supported by substantial evidence in the transcript and elsewhere in the administrative record, and is not arbitrary, capricious, or otherwise not in accordance with law.

6. The proposed amendments are in compliance with the requirements of the Environmental Improvement Act. NMSA 1978, §74-1-6, 74-1-7(A)(3), 74-1-8(A)(3), and 74-1-9.

7. The Department’s proposed revisions of 20.7.3 NMAC, as contained in Attachment 1 to this pleading, should be adopted.

Respectfully Submitted,

NEW MEXICO ENVIRONMENT DEPT.



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CERTIFICATE OF SERVICE

I certify that the foregoing was served by email on the following this 19th Day of December, 2012:

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TITLE 20 ENVIRONMENTAL PROTECTION
CHAPTER 7 WASTE WATER AND WATER SUPPLY FACILITIES
PART 3 LIQUID WASTE DISPOSAL AND TREATMENT

20.7.3.1 ISSUING AGENCY: New Mexico Environmental Improvement Board.
[20.7.3.1 NMAC - Rp, 20.7.3.1 NMAC, 9/1/05]

20.7.3.2 SCOPE:

A. This part, 20.7.3 NMAC, applies to on-site liquid waste systems, and effluent from such systems, that ~~are designed to receive and do~~ receive two thousand (2,000) gallons or less of liquid waste per day, and that do not generate discharges that require a discharge plan pursuant to 20.6.2 NMAC or a national pollutant discharge elimination system (NPDES) permit.

B. 20.7.3.306 and ~~[809]~~808 NMAC apply to the disposal of on-site septage and holding tank wastes.
[20.7.3.2 NMAC - Rp, 20.7.3.2 NMAC, 9/1/05]

20.7.3.3 STATUTORY AUTHORITY: NMSA 1978, Sections 74-1-6, 74-1-7(A)(3), 74-1-8(A)(3), and 74-1-9(Repl. Pamph 1993 and Cum. Supp. 1997).
[20.7.3.3 NMAC - Rp, 20.7.3.3 NMAC, 9/1/05]

20.7.3.4 DURATION: Permanent.
[20.7.3.4 NMAC - Rp, 20.7.3.4 NMAC, 9/1/05]

20.7.3.5 EFFECTIVE DATE: September 1, 2005, except where a later effective date is indicated in the history note at the end of a section.
[20.7.3.5 NMAC - Rp, 20.7.3.5 NMAC, 9/1/05]

20.7.3.6 OBJECTIVE: To protect the health and welfare of present and future citizens of New Mexico by providing for the prevention and abatement of public health hazards and surface and ground water contamination from on-site liquid waste disposal practices.
[20.7.3.6 NMAC - Rp, 20.7.3.6 NMAC, 9/1/05]

20.7.3.7 DEFINITIONS: As used in 20.7.3 NMAC.

A. Terms starting with the letter 'A' are defined as follows:

(1) "absorption area" means the area in square feet of infiltrative surface in a soil disposal system designated to receive effluent from a treatment unit;

(2) "absorption bed" means a conventional disposal method greater than 3 feet in width and where the minimum horizontal dimension is greater than the vertical dimension;

(~~[2]~~3) "advanced treatment" means any process of wastewater treatment that removes a greater amount of contaminants than is accomplished through primary treatment; advanced treatment may include physical or chemical processes;

(~~[3]~~4) "aggregate" means clean washed gravel [~~(no greater than 4% fines by weight);~~]or [clean] crushed rock, having a hardness value of 3 or more on the Mohs scale of hardness, or [proprietary or other] a synthetic media reviewed by the wastewater technical advisory committee and approved by the department; "aggregate" shall have a minimum size of 3/4 inch and a maximum size of 2 1/2 inches, no greater than 4% fines by weight or volume and provide no less than 35% void space under field conditions; the aggregate shall be durable, inert, [~~and shall have a hardness value of 3 or more on the Mohs scale of hardness so it will~~] maintain its integrity, not collapse or disintegrate with time, and not be detrimental to the performance of the system or to groundwater quality;

(~~[4]~~5) "alternative disposal" means any approved on-site liquid waste disposal method used in lieu of, including modifications to, a conventional disposal method; [~~these include but are not limited to, privies, cluster systems, composting/incineration toilets, mounds, evapotranspiration [beds], subsurface irrigation, holding tanks, graywater systems, alternating drainfields, non-discharging constructed wetlands, non-gravity systems, approved surface applications and pressure-dosed systems;~~]

Yellow highlight indicates changes made after the conclusion of the public hearing.

1 ([5]6) “amendment of permit” means a change that does not affect the permitability of a liquid waste
2 system, including a change of ownership or ~~contractor~~ installer, and is not a “modification” as defined in this
3 section;

4 (7) “applicant” means the owner applying for a permit to install, modify, or operate an on-site liquid
5 waste system;

6 ([6]8) “approved” means:

7 (a) materials, products or procedures that have been reviewed by the wastewater technical
8 advisory committee, if required, and accepted for use by the department;

9 (b) a liquid waste system that was permitted~~[-constructed]~~ and installed in compliance with the
10 standards and requirements of this regulation and received department authorization for use; or

11 (c) a person or entity authorized by the department to design, install, modify or maintain liquid
12 waste systems or a person authorized by the department to perform site or liquid waste system evaluations; and

13 ([7]9) “arroyo” means a dry wash or draw that flows occasionally in response to precipitation, a
14 watercourse (as a creek or stream) in an arid region or a water carved gully or channel.

15 B. Terms starting with the letter ‘B’ are defined as follows:

16 (1) “bedrock” means the more or less solid, undisturbed rock in place either at the surface or beneath
17 surficial deposits of gravel, sand or soil, or a consolidated rock formation of impervious material that may exhibit
18 jointed, fractured or deteriorated characteristics, or the R horizon of a soil profile as defined in the United States
19 department of agriculture (USDA) soil survey manuals;

20 (2) “bedroom” means any room ~~[or unfinished area]~~ within a building that is designated ~~[or might~~
21 ~~reasonably be used]~~ as a sleeping room [pursuant]on drawings submitted to the responsible building permitting
22 authority, ~~[or]~~ manufactured housing authority or, in the case of unpermitted systems, to the department;

23 (3) “biochemical oxygen demand” or “BOD” means the rate at which organisms use the oxygen in
24 water or wastewater while stabilizing decomposable organic matter under aerobic conditions;

25 (4) “blackwater” means waste from a liquid flushing toilet, urinal, kitchen sinks, dishwashers or
26 laundry water from the washing of material soiled with human excreta, such as diapers;

27 (5) “body of water” means all constrained water including water situated wholly or partly within or
28 bordering upon New Mexico, whether surface or subsurface, public or private;

29 (6) “building drain” means that part of the lowest piping of a drainage system that receives the
30 collective liquid waste discharge from soil, waste and other drainage piping inside a building and conveys it to the
31 building sewer that begins two (2.0) feet outside the vertical plane of the building wall, residential or commercial
32 unit; and

33 (7) “building sewer” means that part of the horizontal piping of a drainage system that extends from
34 the end of the building drain located two (2.0) feet outside the building wall and that receives the liquid waste
35 discharge from the building drain and conveys it to a liquid waste treatment unit or approved point of disposal.

36 C. Terms starting with the letter ‘C’ are defined as follows:

37 (1) “canal” means a man-made ditch or channel that carries water for purposes other than domestic
38 consumption;

39 (2) “certificate of registration” means a permit for the continued operation of a previously
40 unpermitted on-site liquid waste system to operate an unpermitted liquid waste system installed prior to February 1,
41 2002 after an evaluation is conducted pursuant to Subsection J of 20.7.3.401 NMAC;

42 (3) “cesspool” means an excavation or non-water tight unit that receives untreated water-carried
43 liquid waste allowing direct discharge to the soil;

44 (4) “clay” means:

45 (a) a soil separate consisting of particles less than 0.002 millimeters in diameter; or

46 (b) the textural class name of any soil that contains 40% or more clay, less than 45% sand and
47 less than 30% silt;

48 (5) “clearance” means the vertical thickness of suitable soil between the lowest point of a liquid
49 waste disposal system and the seasonal high ground water table, bedrock or other limiting layer;

50 (6) “cluster system” means a wastewater system that serves more than one unit and treats 2000
51 gallons per day or less of wastewater;

52 (7) “coarse sand” means soil comprised of 25% or more of soil particles 0.5 to 2.0 mm in diameter
53 and less than 50% of any other grade of sand;

54 (8) “commercial liquid waste” means wastewater, whether treated or untreated, that exceeds 300 mg/l
55 BOD, 300 mg/l TSS, 80 mg/l total nitrogen or 105 mg/l fats, oils and grease;

Yellow highlight indicates changes made after the conclusion of the public hearing.

(9) “commercial unit” means a structure that is not a residential unit but which has sewage producing fixtures such as sinks, baths, showers, toilets, urinals, dish- and clothes-washers or floor drains for receiving liquid waste including but not limited to uses included in Table 201.1;

(10) “conditional approval” means the approval of an on-site treatment or dispersal product that has been reviewed by the wastewater technical advisory committee and granted permission by the department to install the product or products on a limited number of sites for the purpose of verifying performance of the product;

(11) “conventional disposal” means a subsurface soil absorption system with gravity distribution of the effluent, with or without a lift station, constructed in accordance with the standards set forth in this regulation, including trench or bed absorption areas and seepage pits;

~~[(11)]~~(12) “conventional treatment” means a septic tank where primary treatment occurs; and

~~[(12)]~~(13) “conventional treatment system” means an on-site liquid waste system utilizing both conventional treatment and conventional disposal; ~~[for fee purposes only,]~~ “conventional treatment system” includes privies, holding tanks and vaults.

D. Terms starting with the letter ‘D’ are defined as follows:

(1) “degrade a body of water” means to reduce the physical, chemical or biological qualities of a body of water and includes, but is not limited to, the release of material that could result in the exceeding of standards established by 20.6.4 NMAC, Standards for Interstate and Intrastate Surface Waters, by 20.6.2 NMAC, Ground and Surface Water Protection and by 20.7.10 NMAC, Drinking Water;

(2) “department” means the New Mexico environment department;

(3) “design flow” means the flow rate for which an on-site liquid waste system must be designed in order to assure acceptable system performance, assuming the use of conventional plumbing fixtures;

(4) “disinfected” or “disinfection” means the use of any process designed to effectively kill most micro-organisms contained in liquid waste effluent including essentially all pathogenic (disease causing) organisms, as indicated by the reduction of the ~~[fecal coliform]~~E. coli concentration to a specific level; these processes include, but are not limited to, suitable oxidizing agents such as chlorine, ozone and ultraviolet light;

(5) “disposal system” means a generally recognized system for disposing of the discharge from a liquid waste treatment unit and includes, but is not limited to, seepage pits, drainfields, evapotranspiration systems, sand mounds and irrigation systems;

(6) “domestic liquid waste” means wastewater that does not exceed 300 mg/l BOD, 300 mg/l TSS, 80 mg/l total nitrogen or 105 mg/l fats, oils and grease; and

(7) “drainage ditch” means an unlined trench dug for the purpose of draining water from the land or for transporting water for use on the land.

E. Terms starting with the letter ‘E’ are defined as follows:

(1) “edge of a watercourse, canal or arroyo” means that point of maximum curvature at the upper edge of a definite bank or, if no definite bank exists, the highest point where signs of seasonal high water flow exist;

(2) “effluent” means the discharge from the final treatment unit;

(3) “effluent disposal well” means a prohibited method of disposal consisting of a drilled, driven or bored shaft or dug hole with depth greater than any surface dimension, used for subsurface emplacement of liquid waste, including, but not limited to, abandoned water supply wells, irrigation wells and test holes, but excluding seepage pits used as disposal systems, which conform to the standards in 20.7.3.702 NMAC;

(4) “effluent irrigation” means the use of wastewater effluent to water landscaped areas, fruit trees or nut trees.

“elevated system” means a system installed either partially or completely above grade in a constructed fill area for the purpose of meeting clearance to a limiting layer.

(5) “enclosed system” means a watertight on-site liquid waste system that does not discharge to the soil, including, but not limited to, holding tanks and lined evapotranspiration systems;

(6) “established on-site liquid waste system” means an on-site liquid waste system that has been in active use at any time during the ten (10) years prior to submission of a permit application and in compliance with any liquid waste disposal regulation in effect at the time of installation, excluding the permitting or registration process, but does not include cesspools installed after September 14, 1973;

(7) “evapotranspiration system” means a disposal system designed to dispose of effluent through evaporation and plant uptake and transpiration; and

(8) ~~[“experimental system” also referred to as “innovative technology” means, without limitation, any on-site liquid waste system utilizing a method of liquid waste treatment technology, processes, equipment or components that are not fully proven in the circumstances of their intended use, but, based upon documented research and demonstration, appear to offer benefits which outweigh the potential risks of failure, or a method of~~

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disposal that is not currently approved by the department; experimental systems shall be submitted for review to the wastewater technical advisory committee (WTAC) who shall recommend the system for full approval, recommend approval with conditions or reject the proposed system; final approval of experimental systems shall be at the discretion of the secretary.]

“experimental approval” means the approval of an on-site treatment or dispersal product that has been reviewed by the wastewater technical advisory committee and granted permission by the department to install the product or products on a very limited number of sites for the purpose of verifying performance and obtaining advancement to conditional approval.

F. Terms starting with the letter ‘F’ are defined as follows:

(1) “failed system” means, without limitation, an on-site liquid waste system that does not operate as permitted, that does not provide a level of treatment at least as effective as that provided by on-site liquid waste systems that meet the requirements of 20.7.3 NMAC or that poses a hazard to public health or degrades a body of water; and

(2) “fixture units” means a quantity of flow as defined in the [UPC]New Mexico plumbing code upon which plumbing systems are sized.

G. Terms starting with the letter ‘G’ are defined as follows:

(1) “gravels” means, for purposes of soils classification, a soil separate consisting of particles greater than 2 mm in diameter;

(2) “graywater” means untreated household wastewater that has not come in contact with toilet waste and includes wastewater from bathtubs, showers, washbasins, clothes washing machines and laundry tubs, but does not include wastewater from kitchen sinks, dishwashers or laundry water from the washing of material soiled with human excreta, such as diapers; and

(3) “ground water” means interstitial water that occurs in saturated earth material and is capable of entering a well in sufficient amounts to be utilized as a water supply.

H. Terms starting with the letter ‘H’ are defined as follows:

(1) “hazard to public health” means the indicated presence in water or soil of biological, chemical or other contaminants under such conditions that could adversely impact human health, including, but is not limited to, surfacing liquid waste, degradation to a body of water used as, or has the potential to be used as, a domestic water supply source, presence of an open cesspool or tank or exposure of liquid waste or septage in a manner that allows transmission of disease;

(2) “holding tank” means a non-discharging watertight tank designed to receive and retain liquid waste for periodic pumping and disposal off-site;

(3) “homeowner” means a person or persons who owns and occupies, or plans to occupy, a single family home; and

(4) “household hazardous waste” means a wide range of household products that have the characteristics of hazardous waste when discarded, including but not limited to, pesticides and herbicides, oil-based paints and stains, automobile fluids (antifreeze, motor oil, transmission, steering and brake fluids, gasoline), pool chemicals, hobby chemicals and darkroom chemicals.

I. Terms starting with the letter ‘I’ are defined as follows:

(1) “imminent hazard to public health or safety” means any situation with the potential to immediately and adversely impact or threaten public health or safety;

(2) “impervious formation” means any soil or rock formation with a hydraulic conductivity of 10^{-7} cm/sec or less;

(3) “industrial process wastewater” means non-household wastewater, excepting the following: human excreta; used water from showers, washbasins and dishwashers; and food preparation waste; any wastewater generated in a commercial activity that contains the materials prohibited by Subsection A of 20.7.3.304 NMAC is industrial process wastewater;

(4) “inspector” means a person certified by the department to be competent in the physical examination and evaluation of on-site liquid waste systems;

(5) “installer” means any person who holds a valid and appropriate classification of contractor’s license issued by the New Mexico construction industries division for the construction of on-site liquid waste systems;

([5]6) “interstitial water” means water in spaces between solid earth particles; [and]

([6]7) “invert” means the lowest portion of the internal cross section of a pipe or fitting;

(8) “irrigation” means the use of wastewater effluent to water landscaped areas or fruit and nut trees.

J. Terms starting with the letter 'J' are defined as follows: [RESERVED]

K. Terms starting with the letter 'K' are defined as follows: [RESERVED]

L. Terms starting with the letter 'L' are defined as follows:

(1) "lateral" means a secondary water or wastewater pipeline branching directly from a central supply pipeline or manifold leading to an irrigation site;

(2) "limiting layer" means an impervious formation, bedrock or the seasonal high ground water table;

(3) "liner" means a manufactured or naturally occurring substance that restricts seepage to no more than 10^{-7} cm/sec. over the design service life of the lined unit; manufactured liners must have a minimum single-ply thickness of 20 mils and have no leaks;

(4) "liquid capacity" means the volume of liquid that is contained in a septic tank or treatment unit measured from the invert of the outlet; "liquid capacity" shall be calculated by multiplying the inside length by the inside width by the depth measured from the invert of the outlet to the unit's floor and converting the resulting sum to gallons;

(5) "liquid waste" means ~~[the discharge of]~~ wastewater generated from any residential or commercial unit where the total wastewater ~~[discharge on a lot]~~received by a liquid waste system is 2000 gallons per day or less; liquid waste includes without limitation human excreta and water carried waste from plumbing fixtures, including, but not limited to, wastes from toilets, sinks, showers, baths, clothes- and dish-washing machines and floor drains; liquid waste also includes non-water carried wastes discharged into holding tanks, privies and vaults; specifically excluded from the definition of liquid waste are industrial process wastewaters, roof drainage, mine or mill tailings or wastes;

(6) "liquid waste system" means ~~[a]~~a liquid waste treatment unit or units and associated disposal systems, or parts thereof, serving a residential or commercial unit ~~[on a lot]~~; liquid waste systems include enclosed systems, holding tanks, vaults and privies but do not include systems or facilities designed to receive or treat mine or mill tailings or wastes;

(7) "liquid waste treatment unit" means a component of the on-site liquid waste system where removal, reduction or alteration of the objectionable contaminants of wastewater is designed to occur; it may include a holding component but does not include soil;

(8) "load" or "loading" means:

(a) in the context of the biological or chemical load received by an on-site liquid waste system, the amount of material applied to an on-site system liquid waste component per unit area or unit volume;

(b) in the context of the structural load applied to an on-site liquid waste structural component, the structural force applied to a liquid waste system component per surface area; and

(9) "lot" means a unified parcel ~~[excluding roadways and roadway easements;]~~ legally recorded or validated by other means; "lot" includes any contiguous parcel subject to a legally recorded perpetual easement that dedicates the servient parcel for the disposal of liquid waste generated on the dominant parcel.

M. Terms starting with the letter 'M' are defined as follows:

(1) "maintenance contract" means a contract between the system owner and a maintenance service provider in which the maintenance service provider agrees to provide periodic inspections in regards to the operation, maintenance and repair of the system;

(2) "maintenance service provider" means a public entity, company or individual in the business of maintaining liquid waste systems according to manufacturers' specification;

(3) "manifold" means a part of a water distribution system normally located between the laterals and central supply line; the manifold splits the flow into a number of flows, either for distribution or for application to the land;

(4) "may" means discretionary, permissive or allowed; and

(5) "modify" or "modification" of a liquid waste system means:

(a) to change the method of on-site liquid waste treatment or disposal;

(b) to change the design of the on-site liquid waste system;

(c) to increase the design flow or load received by the on-site liquid waste system above the original design flow or load; or

(d) replace or expand the treatment unit or disposal system.

N. Terms starting with the letter 'N' are defined as follows:

(1) "New Mexico plumbing code" means 14.8.2 NMAC; and

(2) ~~[RESERVED]~~ "non-discharging system" means a watertight system that allows no discharge of wastewater except through evaporation, transpiration or pumping, including, but not limited to, lined evaporation systems, lined evapotranspiration systems, holding tanks and vaults.

O. Terms starting with the letter 'O' are defined as follows:

- (1) "off-site water" means the domestic water supply for the lot is from:
 - (a) a private water supply source that is neither within the lot nor outside the lot within one hundred (100) feet of the property line of the lot; or
 - (b) a public water supply source that is not within the lot;
- (2) "on-site" means located on or within a lot;
- (3) "on-site liquid waste system" means a liquid waste system located on the lot where the liquid waste is generated;
- (4) "on-site water" means the domestic water supply for the lot is from:
 - (a) a private water supply source that is within the lot or within one hundred (100) feet of the property line of the lot; or
 - (b) a public water supply source that is within the boundaries of the lot;
- (5) "orphaned advanced treatment system" means an advanced liquid waste treatment system whose manufacturer no longer exists or that is no longer approved for installation in the state of New Mexico, or for which the manufacturer no longer provides training in maintenance activities: and
- (6) "owner" means any person who owns:
 - (a) an on-site liquid waste system or any component thereof^[7]; or
 - (b) any lot upon which any on-site liquid waste system or any component thereof is located.

In the case of property sold or purchased on a real estate contract, the "owner" of the property is the buyer. If the property sold or purchased on a real estate contract is a divided interest of common property, owned collectively by multiple owners, the "owner" of the common property is the entity or board specifically designated in by-laws governing common property.

P. Terms starting with the letter 'P' are defined as follows:

- (1) "percolation rate" means the rate of entry of water into soil as determined by a standard soil percolation test at the depth and location of the proposed soil disposal system;
- (2) "permanently displayed" means, in context of septic tank legends, embossed into the tank surface or a mechanically attached, non-corrosive plate;
- (3) "permit" means a written approval from the department to install, modify, or operate an on-site liquid waste system;
- (4) "permittee" means any owner of a permitted on-site liquid waste system;
- (5) "person" means any individual, partnership, firm, public or private corporation, association, trust, estate, the state or any political subdivision or agency or any other legal entity or their legal representative, agents or assigns;
- (6) "primary treatment" means a liquid waste treatment process that takes place in a treatment unit and allows those substances in wastewater that readily settle or float to be separated from the water being treated; primary treated wastewater does not contain constituents in excess of the following concentrations exceed 200 mg/l BOD, 100 mg/l TSS, 60 mg/l total nitrogen, or 60 mg/l fats, oils and grease;
- (7) "private water supply source" means a water supply source such as a well, spring, infiltration gallery or surface water withdrawal point used to provide water to a water supply system, if such system does not have a least fifteen (15) service connections and does not serve an average of twenty-five (25) individuals at least sixty (60) days out of the year;
- (8) "privy" or "outhouse" means a receptacle for non-liquid-carried human excreta allowing direct discharge to the soil;
- (9) "professional engineer" or "P.E." means a professional engineer licensed under the New Mexico Engineering and Survey Practice Act; "professional engineer" includes engineers licensed in any state of the United States for engineering related to a product design and manufacture of propriety products;
- (10) "proprietary system" means a system patented, trademarked or otherwise the intellectual property of manufacturers not in the public domain; and
- (11) "public water supply source" means a water supply source such as a well, spring, infiltration gallery or surface water intake structure used to provide water to a public water supply system for human consumption if the system served has at least fifteen (15) service connections or regularly services an average of twenty-five (25) individuals at least sixty (60) days out of the year.

Q. Terms starting with the letter 'Q' are defined as follows:

- (1) "qualified homeowner" means a person who is the landowner of record residing at the property who has been provided homeowner installation training materials and who has passed an exam administered by the department

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(2) [RESERVED]

R. Terms starting with the letter 'R' are defined as follows:

(1) "real estate contract" means a contractual document creating rights and obligations between a seller and buyer of real property, or limited interest in property owned collectively by multiple owners, under which the buyer acquires equitable title to the property at the time the parties enter into the real estate contract and the seller agrees to transfer legal title to the property to the buyer at some date in the future upon buyer's fulfillment of all terms and conditions of the real estate contract, including, but not limited to payment in full of the purchase price of the property;

(2) "registration" means a permit to operate an unpermitted liquid waste system installed prior to February 1, 2002 after an evaluation is conducted pursuant to Subsection J of 20.7.3.401 NMAC;

(3) "repair" means servicing or replacing, with like kind, mechanical or electrical parts of an approved liquid waste system, pumping of septage or making minor structural corrections to a tank or distribution box;

([2]4) "residential unit" means a structure that is primarily used for living quarters but does not include facilities listed in Table 201.1; and

([3) ~~"replacement area" means an unobstructed area within a lot designated to allow future construction of a replacement disposal area as required by Subsection H of 20.7.3.201 NMAC;~~

([4]5) "retention/detention area" means an area on a parcel of property specifically designated and designed to capture and hold water resulting from the runoff of precipitation[; and].

([5) ~~"roadway" means the surface area of land dedicated by easement or use to provide vehicular passage serving more than one lot or more than five residential or commercial units on a single property.]~~

S. Terms starting with the letter 'S' are defined as follows:

(1) "sand" means:

(a) a soil separate consisting of individual rock or mineral fragments that range in diameter from 0.05 to 2.0 millimeters; or

(b) the textural class name of any soil that contains 85% or more sand and not more than 10% clay;

(2) "sand-lined trench" means a combined treatment component and disposal system consisting of 24 inches of sand, meeting the latest version of ASTM C33-03 specifications or equivalent, below a low pressure pipe disposal system;

(3) "seasonal high ground water table" means the highest level to which the upper surface of ground water may be expected to rise within twenty-four (24) consecutive months;

([3]4) "seasonal high water flow" means the highest level that perennial or intermittent surface waters may be expected to rise as a result of a 25 year, 6 hour storm event;

([4]5) "secondary treatment" means ~~[a wastewater treatment process used to convert dissolved or suspended materials into a form more readily separated from the water being treated; the process is commonly a biological treatment process followed by settling and clarification resulting in]~~ a reduction of the 5-day biochemical oxygen demand (BOD5) and total suspended solids (TSS) concentrations ~~[to a level specified in 20.7.3.602 NMAC];~~

([5]6) "secretary" means the secretary of environment or a designated representative;

([6]7) "seepage pit" means a type of absorption system that uses a vertical, ~~[cylindrical,]~~ underground receptacle so constructed as to allow the disposal of effluent by soil absorption through [its] the sidewalls; the maximum horizontal dimension shall not exceed the vertical dimension;

([7]8) "septage" means the residual wastes and water periodically pumped from a liquid waste treatment unit or from a holding tank;

([8]9) "septic tank" means a liquid waste treatment unit designed to provide primary treatment and anaerobic treatment prior to disposal;

([9]10) "setback distance" means the distance measured by a straight horizontal line between the on-site liquid waste system, its designated replacement area, or portion thereof, and the object being considered;

([10]11) "shall" means mandatory;

([11]12) "silt" means:

(a) a soil separate consisting of particles between 0.05 and 0.002 millimeters in diameter; or

(b) the textural class name of any soil that contains 80% or more silt and less than 12% clay;

([12]13) "soil" means sediment or other unconsolidated accumulations of mineral particles that may or may not contain organic material and that have filtering properties;

(14) “soil replacement” means replacement of existing soil with suitable soil in a new or existing disposal system site to overcome limitations of the existing soil;

(15) “split flow” means a building drain for the conveyance of wastewater that is designed to capture two waste streams, one stream from the toilet and the other stream from all other fixtures including bathtubs, showers, washbasins, clothes washing machines, laundry tubs, kitchen sinks and dishwashers, for the purpose of reducing the total nitrogen discharged from the building; a split flow system shall consist of a holding tank for the toilet waste only and a disposal system for the remainder of the waste;

(16) “suitable soil” means a soil, whether naturally occurring or introduced, that will treat the primary effluent effectively and act as an effective filter and remove organisms and suspended solids prior to the effluent reaching ground water, bedrock or a limiting layer, and that will provide adequate transmission to prevent a failed system; suitable soils are classified Table 703.1; [and]

(17) “surface application” means the application of disinfected effluent to the ground surface where access is restricted by artificial or natural conditions.

T. Terms starting with the letter ‘T’ are defined as follows:

(1) ~~“technical advisory committee” or “TAC” means the wastewater technical advisory committee created by NMSA 1978 Section 9-7A-15;~~

(2) “tertiary treatment” means additional treatment beyond secondary treatment standards, specifically, the reduction in the total nitrogen concentration;

(3) “test hole” means a hole dug in the proposed disposal field area a minimum of seven (7) feet deep or four (4) feet below the bottom of disposal field, whichever is greater, and a minimum of two (2) feet wide; the test hole shall be sufficient to examine the soil visually for type, structure, mottling, impervious layers and other soil characteristics, and to determine the seasonal high water table level; a soil boring may be used to determine the soil characteristics and soil depth;

(4) “total design flow” means the sum of design flows for all on-site liquid waste systems and other wastewater discharges on a lot;

(5) “total nitrogen” or “TN” means the combined organic nitrogen, ammonia, nitrite and nitrate contained in the wastewater or effluent; [and]

(6) “total suspended solids” or “TSS” means the measurable component of solid matter suspended in water or wastewater; and

(6) “transfer” means the transfer of equitable or legal title to a property.

U. Terms starting with the letter ‘U’ are defined as follows:

(1) ~~“uniform plumbing code” or “UPC” means the 1997 uniform plumbing code, 14-11.3 NMAC and the 1997 state of New Mexico plumbing code and mechanical code, 14-9.2 NMAC, or the successor versions of each as adopted by the construction industries division of the New Mexico regulation and licensing department and promulgated in the New Mexico administrative code or another applicable code as adopted by the authority having jurisdiction; and~~

~~(2) [RESERVED]~~

V. Terms starting with the letter ‘V’ are defined as follows:

(1) “vault” means a non-discharging, watertight tank designed to receive and retain non-liquid carried human excreta for periodic pumping and disposal off-site; and

(2) “variance” means an administrative procedure authorizing the issuance of a permit or use of a system that does not meet the specific requirements of 20.7.3 NMAC but which meet the intent of 20.7.3 NMAC.

W. Terms starting with the letter ‘W’ are defined as follows:

(1) “wastewater” means blackwater and graywater;

(2) “wastewater technical advisory committee” or “WTAC” means the wastewater technical advisory committee created by NMSA 1978 Section 9-7A-15;

(3) “watercourse” means any perennial, intermittent or ephemeral surface water conveyance channel including but not limited to a river, creek, arroyo, canyon, draw, canal or wash, or any other channel having definite banks and beds with visible evidence of the flow of water;

(4) “water(s) of the state” means [all interstate and intrastate waters including natural ponds and lakes, playa lakes, reservoirs, perennial streams and their tributaries, intermittent streams, sloughs, prairie potholes and wetlands] surface waters of the state as defined by 20.6.4.7S(5) NMAC, or its successor definition;

(5) “watertight” means not allowing water to pass in or out or as otherwise determined in 20.7.3 NMAC; and

(6) “wetlands” means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation

Yellow highlight indicates changes made after the conclusion of the public hearing.

typically adapted for life in saturated soil conditions in New Mexico; constructed wetlands are not included in this definition.

X. Terms starting with the letter 'X' are defined as follows: [RESERVED]

Y. Terms starting with the letter 'Y' are defined as follows: [RESERVED]

Z. Terms starting with the letter 'Z' are defined as follows: [RESERVED]

[20.7.3.7 NMAC - Rp, 20.7.3.7 NMAC, 9/1/05; A, 4/1/07; A, 11/21/11]

20.7.3.8 GENERAL PROVISIONS:

A. Interpretation: The definitions in 20.7.3.7 NMAC shall be construed so as to achieve the objective of 20.7.3 NMAC.

B. Alternative Resources: When guidance is sought in areas not covered by 20.7.3 NMAC, the most recent version of the following resources may provide guidance. In cases where reference to these alternative resources is proposed the department shall make the final determination of applicability.

(1) The American national standards institute (ANSI) book of codes.

(2) The American society for testing and materials (ASTM) testing manual.

(3) The international association of plumbing and mechanical officials (IAPMO) codes.

(4) The National sanitation foundation (NSF) standard 40, standard 41, and standard 46.

(5) EPA design manuals for onsite wastewater treatment and disposal systems.

(6) USDA soil survey manuals.

(7) New Mexico administrative code.

(8) Wisconsin mound soil absorption system: siting, design and construction manual, university of Wisconsin-Madison.

(9) The Consortium of Institutes for Decentralized Wastewater Treatment (CIDWT), decentralized wastewater treatment glossary and installation manual.

(10) other technical publications.

C. The department field offices shall make educational materials regarding on-site liquid waste systems available to the public and to permit applicants. Information on proper maintenance of systems shall be given to new permittees. Educational materials shall be in both English and Spanish.

[20.7.3.8 NMAC - Rp, 20.7.3.8 NMAC, 9/1/05]

20.7.3.9 through 20.7.3.200 [RESERVED]

20.7.3.201 PROCEDURES; GENERAL REQUIREMENTS:

A. Every owner shall be responsible for the storing, treating and disposing of liquid waste generated on that property. Every owner shall be responsible for ensuring that the liquid waste system on that property and any excavation related to the liquid waste system do not pose a public safety hazard.

B. No person shall discharge untreated liquid waste except into a permitted and approved enclosed system, a permitted and approved liquid waste treatment unit or a public sewer system, except for the discharge of graywater pursuant to 20.7.3.810 NMAC. All liquid waste systems installed in accordance with a liquid waste permit issued by the department prior to July 1, 2012 shall be deemed to have operational approval. No person shall discharge liquid waste or effluent into a cesspool or effluent disposal well.

C. No person shall discharge effluent from a liquid waste treatment unit except through a permitted and approved liquid waste disposal system or to a permitted public sewer system. No person shall discharge effluent from a liquid waste treatment unit to a ~~cesspool~~ cesspool or effluent disposal well.

D. No person shall install, have installed, modify or have modified, own, operate or use an on-site liquid waste system that, by itself or in combination with other on-site liquid waste systems, may cause a hazard to public health or degrade any body of water. All systems shall be installed, operated and maintained in accordance with the permit and applicable regulations.

E. All residential and commercial units utilizing an on-site liquid waste system shall connect to a public sewer ~~[if required by the local authority having jurisdiction]~~ upon availability and in accordance with the local authority that has jurisdiction. A public sewer shall be deemed available when the public sewer is located in any thoroughfare, right-of-way or easement abutting the lot on which the residential or commercial unit is located. The on-site liquid waste system shall be properly abandoned in accordance with 20.7.3.307 NMAC within 30 days of connection to the public sewer.

F. The type of on-site liquid waste system shall be determined on the basis of location, lot size, soil and site characteristics. The system, except as otherwise approved, shall consist of a liquid waste treatment unit and associated disposal system.

G. An on-site liquid waste system shall be located wholly on the same lot, which is the site of the source or sources served by the on-site liquid waste system.

~~[H. All disposal systems that utilize subsurface discharge and soil absorption shall be designed with an unobstructed replacement or reserve area so that additional seepage pits, drainfields or other subsurface absorption areas equivalent to at least 50% of the required original disposal system may be installed if the original system cannot dispose of all the liquid waste or the system needs to be expanded. No division of a lot or construction or remodeling of a permanent structure on the lot shall be made if such division, construction or remodeling impairs the usefulness of the 50% replacement area.]~~

[F]H. A privy may be used for the disposal of human excreta and toilet paper, but not for the disposal of other liquid wastes.

[F]I. On-site liquid waste systems, other than holding tanks, receiving waste from recreational vehicles (RVs) shall provide [pre]treatment of the waste to [the level of domestic waste] concentrations equal to or less than primary treatment levels as defined in Paragraph (6), Subsection [D]P of 20.7.3.7 NMAC, if necessary, prior to discharging to a conventional disposal system. Monitoring of the effluent may be required in accordance with 20.7.3.901 NMAC. Existing permitted on-site liquid waste systems receiving waste from recreational vehicles (RVs) shall continue to be authorized to operate. Upon modification of these existing systems, the system shall be required to provide the level of [pre]treatment of the waste identified above. This section shall not apply to homeowners who occasionally empty waste from one personal RV into the onsite liquid waste system serving their residence, provided that the RV is not used as permanent living quarters.

[K]J. On-site liquid waste systems permitted, but not installed, prior to the effective date of 20.7.3 NMAC shall be installed in accordance with the regulations in effect at the time of the permit issuance, provided that the installation of the system shall be completed within one (1) year of the effective date of 20.7.3 NMAC.

[L]K. ~~[On-site liquid waste systems installed prior to the effective date of 20.7.3 NMAC shall meet the requirements of the regulations in effect at the time of their initial installation, or if there has been a prior permitted modification, the regulations in effect at the time of the most recent permitted modification will apply or the current regulations, whichever is less stringent]~~ Existing on-site liquid waste systems shall meet the regulations in effect at the time of their initial installation or subsequent modification or the current regulation, whichever is less stringent, unless otherwise noted in this regulation.

[M]L. Nothing contained in 20.7.3 NMAC shall be construed to prevent the department from requiring compliance with more stringent requirements than those contained herein, where the department finds that such more stringent requirements are necessary to prevent a hazard to public health or the degradation of a body of water. The following parameters may be considered when determining if a body of water is potentially vulnerable to degradation from liquid waste effluents, and if more stringent requirements may be necessary to prevent such degradation:

(1) a water-table aquifer (includes both unconfined and semi-confined conditions) with a vadose zone thickness of 100 feet or less containing no soil or rock formation that would act as a barrier to saturated or unsaturated wastewater flow;

(2) sites within one quarter (1/4) mile of a known groundwater plume of anthropogenic anoxic or nitrate contamination caused by migration through undisturbed vadose zone, provided that the site overlies the same aquifer;

(3) an aquifer overlain by fractured bedrock;

(4) an aquifer in karst terrain; and

(5) a gaining stream or other body of water adversely affected impacted by nutrients from liquid waste systems.

[N]M. Upon written request, the department shall provide a letter of determination stating whether or not more stringent requirements may be imposed on a lot or parcel of land. This determination shall be valid for one year. The department shall issue the determination letter within 10 working days of receipt of the written request. This letter of determination in no way neither waives or precludes an applicant's regulatory requirements under this part nor predetermines the regulatory requirements of this part upon obtaining a permit.

[O]N. The secretary, or a designated representative, upon presentation of proper credentials and with consent or with an administrative search warrant:

(1) shall have the right of entry to any property on which a permitted or unpermitted on-site liquid waste system regulated by 20.7.3 NMAC exists or is required for the limited purpose of inspecting the liquid waste

system or to determine compliance with these regulations or permit conditions; failure to provide reasonable access for the purpose of inspecting a liquid waste system or to determine compliance with these regulations or permit conditions shall be cause for revocation or suspension of a permit;

(2) shall have access to and may copy any record required to be established and maintained by these regulations or permit conditions; failure to provide reasonable access to or copies of any record required to be established and maintained by these regulations or permit conditions shall be cause for revocation or suspension of a permit; and

(3) may obtain any samples required to determine compliance with 20.7.3 NMAC or permit conditions; failure to provide reasonable access to facilities for the purpose of obtaining samples shall be cause for revocation or suspension of a permit.

O. Determining Eligibility for permitting under 20.7.3.2 NMAC, which restricts effluent flow to 2000 gallons per day or less, shall be determined as follows:

(1) For residential sources, Wastewater flow from residential sources shall be calculated [assuming two (2) persons per bedroom for the first two (2) bedrooms and one (1) person per additional bedroom in a single family dwelling unit and sixty (60) gallons per person per day] at 80% of the design flow as determined according to Subsection P of 20.7.3.201 NMAC. Multiple family dwelling unit wastewater flows shall be calculated as the sum of wastewater flows for each single family unit included.

(2) Wastewater flows for nonresidential sources shall be based on Table 201.1 or generally accepted references (such as the New Mexico plumbing code or the USEPA design manual: *on-site wastewater treatment and disposal systems*).

(3) Wastewater flows for residential and nonresidential sources also may be based on:

(a) professional engineering design calculations that bear the seal and signature of a professional engineer licensed in New Mexico, pursuant to the New Mexico engineering and surveying practice act and the rules promulgated under that authority. Such calculations shall be reviewed by a department engineer, as appropriate; or

(b) the submittal of actual metered water use or effluent flow meter data. To use actual meter data to establish wastewater flow, the applicant must present at least one year of existing meter data collected within the previous five years. Calculate the daily wastewater flow according to the following formula:

$$\frac{A}{B} \left[x \left(\frac{1}{\text{occupancy}} \right) \right] = Q$$

Where: A = highest quarterly totalized meter reading (in gallons) for minimum one year period

B = total number of days in highest metered quarter

[occupancy = percentage of residential units that are used as living quarters by at least one person during the metering period, expressed as a decimal equal to or greater than 0.50, calculated as a weighted average]

Q = daily wastewater flow in gallons per day

[For meter data representing a period of continuous full occupancy, use 1.0 in the formula above. Meter data that includes periods with less than fifty percent occupancy will not be accepted for purposes of determining wastewater flow. The percent occupancy shall be demonstrated by documentation acceptable to the department, such as daily or weekly occupancy logs, detailed rental income records or other similar records. Applicants who submit meter data that results in a wastewater flow equal to or exceeding 1500 gallons per day shall make meter records available for inspection by the department. If a permit is issued, meter records for any quarter that result in a flow exceeding 2000 gallons per day, when calculated according to this section, shall be submitted to the department within 30 days. In addition, quarterly records for the following two quarters shall be submitted. If meter data from any of the succeeding quarters exhibit calculated wastewater flows in excess of 2000 gallons per day, the permit shall be void and the permittee will be referred to the ground-water quality bureau.]

Meter data or certification by a professional engineer shall not be used to determine wastewater flow on exclusively residential properties consisting of less than five residential units. If meter data is not representative of the actual wastewater discharge, as determined by the department, the applicant may be required to submit additional meter data or the department may disallow the use of meter data where its use would result in a gross misrepresentation of the wastewater discharge.

The department may require a calibration of the meter used for determining water or wastewater flow and may disallow the use of inaccurate meter data. Applicants may be required to make future records of metered flow available for inspection by the department.

Yellow highlight indicates changes made after the conclusion of the public hearing.

If a permit is issued, meter records for any quarter that indicate the daily wastewater flow exceeds 2000 gallons per day, quarterly meter records for the following two quarters shall be submitted to the department within 30 days of becoming available to the permittee. If meter data or other information available to the department indicates the average daily wastewater flow has exceeded 2000 gallons per day, the department may void the permit and refer the facility to the ground water quality bureau. The department may require a tamper-proof type meter be installed to verify that future wastewater flows do not exceed 2000 gallons per day.

P. [Design flows shall be calculated as follows:] Determining treatment and disposal system design flow:

(1) For residential sources, the design flow shall be ~~[calculated assuming two (2) persons per bedroom for the first two (2) bedrooms and one (1) person per additional bedroom in a single family dwelling unit and seventy-five (75) gallons per person per day;~~ based on the number of bedrooms as follows:

- (a) 1 bedroom = 150 gallons per day;
- (b) 2 bedrooms = 300 gallons per day;
- (c) 3 bedrooms = 375 gallons per day;
- (d) 4 bedrooms = 440 gallons per day;
- (e) 5 bedrooms = 500 gallons per day; and
- (f) additional bedrooms = 50 gallons per day.

Design flows for multiple family dwelling units [source design flows] shall be calculated as the sum of design flows for each single family unit included. [, and]

(2) ~~[design flows for nonresidential sources shall be based on Table 201.1 or generally accepted references (such as the uniform plumbing code or the USEPA design manual: on-site wastewater treatment and disposal systems); design flows for nonresidential sources also may be based on professional engineering design calculations; total design flows may be determined by the submittal of metered water use or effluent flow data and shall be multiplied by a safety factor of 1.5 for design flow calculations.]~~

Where nonresidential wastewater flow is calculated based upon Table 201.1 or generally accepted references, no design factor is necessary to determine the design flow except as noted in Paragraph (3) below.

(3) For residential and nonresidential facilities with highly variable flows not certified by a professional engineer, a design factor greater than 1.5 may be required to be applied to determine the design flow. Alternatively, flow equalization or other methods of accommodating peak flows may be used with department approval.

(4) Where residential and nonresidential wastewater flow is certified by a professional engineer, no design factor is necessary to determine the design flow, unless deemed appropriate by the professional engineer.

(5) Where residential or nonresidential wastewater flow is determined using existing meter data and calculated in accordance with Subparagraph (b) of Paragraph (3) of Subsection O of 20.7.3.201 NMAC, a design factor of 1.5 [is necessary] shall be applied to the daily average flow to determine design flow. [or as:] An additional peaking factor may be required in accordance with Paragraph (3) above. Metered data shall not be used to determine design flow on properties consisting of less than four residential units.]

(6) [The department may require calibration or replacement of the meter used for determining wastewater use. The department may require a tamper-proof type of meter be installed.] If the design flow could increase significantly beyond existing meter data due to increased occupancy or facility size, the department may require that additional area be available for future expansion of both the treatment and disposal systems.

Table 201.1: Established liquid waste design flow rates

TYPE OF OCCUPANCY	GALLONS PER DAY
1. Airport, Bus Terminal, Train Station	20 per employee 5 per passenger
2. Beauty & Barber Shop	75 per service chair
3. Bowling alleys (snack bar only)	75 per lane
4. Bed and Breakfast	150 first bedroom 100 each additional bedroom
5. Camps: campground with central comfort station with flush toilets, no showers day camps (no meals served)	35 per person 25 per person 15 per person

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	summer and seasonal	50 per person
6.	Churches (Sanctuary) with kitchen waste	2 per seat 7 per seat
7.	Dance hall	5 per person
8.	Doctor and Dentist Office	250 per practitioner, 15 per employee
9.	Factories <u>excluding industrial wastes</u> : per 8-hour shift no showers with showers cafeteria, add	25 per employee 35 per employee 5 per employee
10.	Food Operations: Restaurants operating 16 hours or less per day Restaurants operating more than 16 hours per day Bar, cocktail lounge add per pool table or video game Carry out only, including caterers add per 8-hour shift Food outlets only add for deli add for bakery add for meat department add per public restroom	40 per seat 60 per seat 20 per seat 15 each 50 per 100 sq ft floor space 20 per employee 10 per 100 sq ft floor space 40 per 100 sq ft floor space 40 per 100 sq ft floor space 75 per 100 sq ft floor space 200
11.	Hotels, Motels, Lodges laundries, lounges and restaurants calculated separately	60 per bed
12.	Institutions (resident) Nursing homes Rest homes	75 per person 125 per person 125 per person
13.	Laundries self-service (minimum 10 hours/day) commercial	50 per wash cycle per manufacturer's specifications
14.	Offices	20 per employee per 8-hour shift
15.	Parks: picnic park - toilets only	20 per parking space
16.	Recreation Vehicles (RV) Park without water hookup with water and sewer hookup RV dump stations	75 per space 100 per space 50 per RV
17.	Schools - staff and office Elementary and Day Care Intermediate and High Boarding, total waste gym and showers, add with cafeteria, add	20 per person 15 per student 20 per student 100 per person 5 per student 3 per student
18.	Service stations and convenience stores uni-sex restrooms	400 per toilet 800 per Toilet
19.	Stores public restrooms	20 per employee 10 per 100 sq ft. floor
20.	Swimming and bathing places, including spas and hot tubs, public	10 per person
21.	Theaters, auditoriums Drive-ins	5 per seat 10 per space
22.	Veterinary Clinic add add	250 per practitioner 15 per employee 20 per kennel, stall, or cage

Liquid waste generated by the occupancies above, ~~exceeding that exceeds the concentrations~~ in the definition of domestic liquid waste, shall require ~~[pre]treatment~~ to primary treatment levels as defined in Paragraph (6), Subsection P of 20.7.3.7 NMAC prior to ~~[utilizing]~~ discharging to a conventional ~~[treatment]~~ disposal system.

Q. The minimum liquid capacity of a septic tank shall be determined as follows:

(1) for residential units, the liquid capacity shall be based on the number of bedrooms using Table 201.2; and

(2) for commercial units, the liquid capacity shall be based on the number of plumbing fixture units using Table 201.2; or

(3) if based on flows calculated from Table 201.1 or from estimated design flows pursuant to Paragraphs (2), (3), (4) or (5) of Subsection P of 20.7.3.201 NMAC, the minimum liquid capacity shall be 2.5 times the design flow, whichever is greater.

Table 201.2: Capacity of Septic Tanks

Single family dwellings, number of bedrooms	Other uses maximum fixture units*	Minimum septic tank capacity in gallons served
1	10	750
2 - 3	12	1000
4	15	1200
5 - 6	20	1500
7 - 9	27	2000
	29	2250
	32	2500
	35	2750

* 100 fixture units or less are equal to 31.1 gallons per fixture unit.

R. Waste from a water softener unit shall comply with the following.

(1) Softener waste may be discharged to a conventional treatment unit. If the waste is not discharged to the treatment unit, the waste may be disposed in accordance with other applicable regulations.

(2) For new construction utilizing an advanced treatment system, the softener waste shall not be discharged to the advanced treatment unit. The softener waste shall bypass the advanced treatment unit and discharge directly to the drainfield or be disposed of in some manner acceptable to the department and meets all other state and local regulations.

(3) If a water softener unit is installed at an existing residential or commercial unit utilizing an advanced treatment unit:

(a) the current liquid waste permit shall be amended to reflect the installation;

(b) a written notice shall be submitted to the maintenance service provider of the advanced treatment unit; and

(c) either a demand-initiated regeneration control device (DIR device) shall be installed or the softener waste shall bypass the advanced treatment unit.

(4) If an advanced treatment unit is to be installed at an existing residential or commercial unit with an existing water softener, the installation shall be done in accordance with the permit.

[20.7.3.201 NMAC - Rp, 20.7.3 NMAC, 201, 301, 302, 401, 402, 9/1/05; A, 4/1/07]

20.7.3.202 PROCEDURES; MODIFICATION OF EXISTING SYSTEMS:

A. Prior to the modification of an ~~[existing on-site liquid waste system, either permitted or unpermitted,]~~ established on-site liquid waste system, a permit application must be submitted in accordance with 20.7.3.401-405 NMAC. The portion of the system requiring modification shall be in accordance with the current version of 20.7.3 NMAC except as noted in Subsection C and D of 20.7.3.202 NMAC below.

B. Replacement components for on-site liquid waste systems shall be of materials approved by the department.

C. On-site liquid waste systems modified after the effective date of this regulation:

(1) shall meet the lot size requirements of the regulations in effect at the time of the initial installation or most recent permitted modification; and

(2) the total lot flow shall be increased only if all current standards and requirements are met pursuant to 20.7.3 NMAC. More stringent requirements may be required pursuant to Subsection [M]L of 20.7.3.201 NMAC.

D. The septic tank need not be replaced as part of the modification if the tank is structurally sound, watertight, constructed of approved materials, is functioning properly, [meet the requirements of 20.7.3.501-502 NMAC] and if the existing tank has a liquid capacity within one tank size of the capacity required by Subsection Q of 20.7.3.201 NMAC. In addition, the tank shall be pumped and the inlet and outlet baffles or sanitary tees checked and repaired or replaced, if needed.

E. Upon modification of any part of the system, [A]an approved effluent filter shall be installed in accordance with Subsection[G]H of 20.7.3.502 NMAC and access risers installed over the tank inlet and outlet access openings in accordance with Subsection D of 20.7.3.502 NMAC.

[E]F. Upon the issuance of the permit to modify and the subsequent inspection and approval of the modification, a previously unpermitted system shall be considered permitted and authorized to operate. [20.7.3.202 NMAC - N, 9/1/05; A, 4/1/07]

20.7.3.203 PROCEDURES; CONSTRUCTION INSPECTIONS AND TESTING:

A. The department may perform site inspections prior to making a decision on a permit application or variance petition, during construction or modification of the system and after completion of the system. The department may require test holes to be excavated and documentation to be provided for purposes of determining soil types, depth of soil and water table depths. In areas where soil conditions are well characterized and groundwater depth is documented, test holes may be waived. The department may collect samples of soil, liquid waste and water, including water from wells, to determine compliance with 20.7.3 NMAC.

B. Upon granting the permit or variance application, if the department determines an inspection is necessary, the department shall indicate the point in the construction process where the first construction inspection is to be scheduled or in accordance with Subparagraph A of this section.

(1) The person doing the work authorized by the permit shall notify the department, orally or in writing, to schedule an inspection time, ~~[orally or in writing]~~, a minimum of 2 working days prior to the inspection. The department may assess a re-inspection fee if the work is not ready for inspection at the time of the scheduled inspection. In the event the inspection is not conducted within one hour after the appointed time of inspection, the ~~[contractor]~~ installer shall take photographs that accurately identify the site and features of the installation and proceed with the installation. Copies of such photographs shall be submitted to the department.

(2) All homeowner installed systems shall be inspected by the department.

(3) If an inspection results in the issuance of a notice of non-approval, a re-inspection shall be required. The person shall notify the department as indicated above.

(4) An installer specialist doing the work authorized by the permit shall notify the department, orally or in writing, of the day and time the work will be ready for inspection. Such notification shall be given at least 2 working days, calculated to the hour, prior to the time of the requested inspection. If the department inspector does not arrive at the site within one hour of the notified time of completion, the installer specialist shall take digital photographs of all components of the installation, shall complete an inspection form provided by the department, and may complete the installation. The installer specialist shall provide electronic copies of the photographs and inspection form to the department within five working days.

C. System components shall be properly identified as to manufacturer and shall meet all specifications specified in 20.7.3 NMAC.

D. The department may require testing to verify watertight construction and initial functioning of any liquid waste system.

(1) Liquid waste treatment units, pump stations or pump chambers shall be considered watertight by successfully completing one of the following testing procedures.

(a) Water pressure testing: Seal the unit, fill with water and let stand for 24 hours. Refill the unit. The unit is approved if the water level is held for 60 minutes.

(b) Vacuum testing: Seal the unit and apply a vacuum to 2 inches (50mm) of mercury. The unit is approved if the vacuum is held for 60 minutes.

(2) The department may require a flow test be performed through the system to the point of effluent disposal. All lines and components shall be watertight. Capacities, required air space, and fittings shall meet the requirements of 20.7.3 NMAC.

(3) The department may require operational testing of advanced treatment components to verify initial functioning.

[20.7.3.203 NMAC - Rp, 20.7.3 NMAC, 204, 408, 9/1/05; A, 4/1/07]

20.7.3.204 through 20.7.3.300 [RESERVED]

20.7.3.301 STANDARDS; LOT SIZE REQUIREMENTS:

A. The requirements of this section apply to all conventional treatment systems that discharge to the soil. Compliance with the requirements of this section shall be based on the total design flow for the lot. Water conservation devices or demonstrated actual flows shall not be used to reduce the requirements of this section. For the purposes of 20.7.3 NMAC, lot sizes shall be calculated to the nearest hundredth (0.01) acre.

B. The date of record for a lot shall be considered to be either:

(1) the date of legal recording in the county clerk's office or validation by other means associated with the most recent change in lot size or boundaries; or

(2) for those lots in subdivisions having received final approval from governments having jurisdiction therein prior to February 1, 1990, such date of record shall be two and one-half (2 1/2) years from the date of final government approval or July 1, 1992, whichever occurs first.

C. A conventional treatment system shall not be installed on a lot sized smaller than 0.75 acre, where there is not an established on-site liquid waste system, except as otherwise provided in Subsection F of 20.7.3.301 NMAC. The size of a lot shall be the total area of the lot ~~[less any area that is subject to a roadway, roadway easement and]~~ plus or minus the area of any liquid waste disposal easements granted to or by another lot, respectively. The design flow for a conventional treatment system shall not exceed 500 gallons per day per acre. For total design flows that exceed the allowable flow or for lots that do not meet the minimum lot size, the total nitrogen discharged to the lot shall be reduced in accordance with Subsection B of 20.7.3.603 NMAC.

D. On-site liquid waste systems installed prior to the effective date of 20.7.3 NMAC shall meet the lot size requirements of the regulations in effect at the time of their initial installation or if there has been a permitted modification, the regulations in effect at the time of the most recent prior permitted modification.

E. Table 301.1 lists the minimum lot sizes required for typical flow rates for conventional treatment systems for lots with a date of record of February 1, 1990 or later.

Table 301.1

TOTAL DESIGN FLOW (gallons per day)	MINIMUM LOT SIZE (acres)
375 or less	0.75
[450] 440	[0.90] 0.88
[600] 500	[1.20] 1.00
750	1.50
1125	2.25
1500	3.00
1875	3.75
2000	4.00

F. ~~[On-site liquid waste systems installed after the effective date of these regulations, on lots with dates of record prior to February 1, 1990, without established on-site liquid waste systems, shall conform to the following:~~

~~_____ (1) for lots less than 0.5 acre, no conventional systems shall be authorized;~~

~~_____ (2) for lots 0.5 acre to 0.75 acre and 100 feet or less to groundwater or within a 200 foot radius of a public water supply well, no conventional systems shall be authorized;~~

~~_____ (3) for lots 0.5 acre to 0.75 acre with a private well, not within a 200 foot radius of a public supply well and 101 feet to 600 feet to groundwater, the total design flow shall not exceed 450 gallons per day or the total design flow allowed in Subsection C of 20.7.3.301 NMAC, whichever is greater, for 3 years after the effective date of these regulations;~~

~~_____ (4) for lots 0.5 acre to 0.75 acre on a public water system, not within a 200 foot radius of a public supply well and 101 feet to 600 feet to groundwater, the total design flow shall not exceed 450 gallons per day or the total design flow allowed in Subsection C of 20.7.3.301 NMAC, whichever is greater, for 5 years after the effective date of these regulations;~~

~~_____ (5) for lots 0.5 acre or larger and greater than 600 feet to groundwater, 450 gallons per day or the total design flow allowed in Subsection C of 20.7.3.301 NMAC, whichever is greater is allowed; and~~

Yellow highlight indicates changes made after the conclusion of the public hearing.

(6) once the extended time periods in Paragraphs (3) and (4) of this subsection have expired, then the lot size/flow limitation in Subsection C of 20.7.3.301 NMAC shall apply to new installations.]

The department may issue permits for lots not complying with Subsection C of 20.7.3.301 NMAC for areas the department has identified and mapped where groundwater is not at risk from nitrogen loading from on-site liquid waste systems. The following hydrogeologic conditions may be considered when determining if groundwater is not at risk:

- (1) groundwater does not exist;
- (2) the uppermost groundwater contains a total dissolved solids concentration greater than 10,000 milligrams per liter;
- (3) the uppermost groundwater occurs under confined conditions;
- (4) the uppermost groundwater occurs at a depth between 400 and 600 feet with one or more geologic strata in the vadose zone that may act as a capillary barrier; and
- (5) the uppermost groundwater occurs at a depth greater than 600 feet.

In areas that have not been identified and mapped by the department, the applicant must demonstrated one of the above conditions exists prior to the issuance of a permit.

G. The following Table 301.2 summarizes the minimum lot size requirements, in acres, and permissible design flows in effect prior to February 1, 1990 and is for the purpose of determining the requirements existing at the time of initial installation or most recent permitted modification.

Table 301.2

RECORD DATE									
01/01/60 to 11/01/73		11/01/73 to 09/07/79*		09/07/79 to 03/01/80		03/01/80 to 11/09/85		11/09/85 to 02/01/90	
Minimum Lot Size	Soil Group **	Min. Lot Size	Total Design Flow (gpd)	Min. Lot Size	Total Design Flow (gpd)	Min. Lot Size	Total Design Flow (gpd)	Min. Lot Size	Total Design Flow (gpd)
OFF-SITE WATER**	0.25***	A	0.50	0-1000	0.50	0-375	0.33	0-375	0.33
		B	0.75	1000- 1500	1.00	376- 1000	0.50	376- 750	0.50
		C	1.00	1500- 2000	1.25	1000- 1500	1.00	750- 1125	1.00
		D	****			1501- 2000	1.25	1126- 1500	1.25
								1501- 2000	1.75
ON-SITE WATER**	0.50***	A	0.75	0-1000	0.75	0-1000	0.75	0-375	0.75
		B	1.00	1000- 1500	1.25	1000- 1500	1.25	376- 750	1.50
		C	1.25	1500- 2000	1.70	1501- 2000	1.70	750- 1125	2.00
		D	****					1126- 1500	2.75
								1501- 2000	3.50

- (1) * The maximum total design flow was 1,000 gpd for the lot sizes shown.
- (2) ** See Subsection H of 20.7.3.301 NMAC.
- (3) *** These requirements applied to lots in subdivisions that were required at the time of subdivision to obtain state health department review and approval.
- (4) **** No on-site liquid waste disposal to soil allowed.
- (5) NOTE: Roadways were first excluded from figuring lot sizes as of 11/09/85.

Yellow highlight indicates changes made after the conclusion of the public hearing.

H. The following Table 301.3 lists the soil types for lot size determinations for the period November 1, 1973 to September 7, 1979: The minimum lot size required for the location of an individual liquid waste disposal system is determined by the most limiting soil group under which any soil characteristic falls.

Table 301.3

SOIL CHARACTERISTICS	A Slight Limitations	B Slight Limitations	C Moderate Limitations	D Severe Limitations
1. SOIL DEPTH (depth to bedrock, in feet)	More than 6 and	More than 6 and	4 - 6 or	Less than 4 or
2. PERCOLATION RATE (rate of percolation of water into soil in minutes per inch)	0 - 15 and	16 - 30 and	31 - 60 or	More than 60 or
3. SEASONAL WATER TABLE (depth to shallowest water table during the year, in feet)	More than 12 and	More than 12 and	4 - 12 or	Less than 4 or
4. SLOPE (incline of the land surface, in percent)	0 - 8 and	0 - 8 and	8 - 25 or	More than 25 or
5. FLOODING POTENTIAL (overflow frequency, in years)	None	None	No more than 1 in 25	More than 1 in 25

I. If the size or boundaries of a lot with an existing on-site liquid waste system are changed so that the total design flow for the lot exceeds the total design flow limitation provided for in Subsection C of 20.7.3.301 NMAC, the permit for the system shall be void.

J. If the size or boundaries of a lot with an existing on-site liquid waste system are changed so that the total design flow for the lot does not exceed the total design flow limitation provided for in Subsection C of 20.7.3.301 NMAC, an amendment to the existing permit shall be submitted.
[20.7.3.301 NMAC - Rp, 20.7.3.302 NMAC, 9/1/05; A, 4/1/07]

20.7.3.302 STANDARDS; SETBACK REQUIREMENTS:

A. On-site liquid waste systems shall be located to meet setback distances, in feet, specified in the following Table 302.1. Setback distances apply to any part of the on-site liquid waste system and its designated replacement area.

Table 302.1: Minimum setback and clearance requirements

From:	To:	Building Sewer	Treatment Unit*	Disposal Field	Seepage Pit
Property lines		clear	5 ft.	5 ft.	8 ft.
Building or structure		2 ft.	5 ft.	8 ft.	8 ft.
Distribution box		--	--	5 ft.	5 ft.
Disposal field		--	10 ft.*****	4 ft*****	10 ft.
Seepage pit		--	10 ft.	10 ft.	12 ft.
Drinking water line*****:					
- private		1 ft.	10 ft.	10 ft.	10 ft.
- public		10 ft.	10 ft.	10 ft.	10 ft.
Drinking Water Source/Well:					
- Private		50 ft.	50 ft.	100 ft.	100 ft.
- Public		50 ft.	100 ft.	200 ft.	200 ft.
Irrigation well		50 ft.	50 ft.	100 ft.	100 ft.
Lined canals		--	10 ft.**	10 ft.**	10 ft.**
Unlined canals, drainage ditches		--	15 ft.**	25 ft.**	25 ft.**

Yellow highlight indicates changes made after the conclusion of the public hearing.

Arroyos	--	15 ft.**	25 ft.**	25 ft.**
Other watercourses,				
Waters of the State	--	50 ft.	100 ft.	100 ft.
Retention/detention or flood irrigation areas	--	15 ft.	15 ft.	15 ft.
Seasonal high water table, bedrock and other impervious layers***	--	--	4 ft. to bottom of system	4 ft. to bottom of system

(1) * Applies to privy pits, enclosed systems, other liquid waste treatment units.

(2) ** Plus depth of channel.

(3) *** Unlined privy pits shall provide clearance of at least 4 feet.

(4) **** Plus 2 feet for each additional foot of depth in excess of [1 foot] below the invert of the distribution perforated pipe.

(5) ***** May be 5 feet when Schedule 40 PVC/DWV pipe is used.

(6) ***** Or applicable plumbing code.

B. Setback distances to watercourses, canals and arroyos shall be measured from the edge of the [seasonal high water flow] defined bank to the on-site liquid waste system component. Setback distances to artificially controlled lakes or reservoirs shall be measured from the closest projected shoreline at the maximum controlled water level.

C. Multiple liquid waste systems, each with an actual design flow of 2,000 gallons per day or less, may be permitted on a single lot provided that disposal systems are set back from each other by distances equal to the sum of the radii of two circular areas, with the radius for each calculated as follows:

$$r = \sqrt{A/\pi} \text{ where}$$

r equals the radius of the required area in feet;

$\sqrt{}$ is square root;

A is area in square feet, which equals design flow (gallons per day) x 1 acre/500 gallons per day x 43,560 square feet/acre; and

π (pi) equals 3.1416.

The centers of the circular areas are to be located at points on the nearest outer boundaries of the two liquid waste disposal systems. Table 302.2 below provides examples of summarizes-radii for design flows based on number of bedrooms only. Radii for other design flows shall be calculated with the formula above. Separation distances to facilities permitted by other entities, such as the ground water quality bureau, may be considered on a case by case basis.

Table 302.2: Radii for calculating minimum distance between systems on a large parcel lot

No. of bedrooms	Design flow, gpd	Minimum acreage lot size, acres*	Radius of A, feet
1	150	0.75	102.0
2	300	0.75	102.0
3	375	0.75	102.0
4	440	0.88	110.5
5	500	1.0	117.8
6	550	1.1	123.5

*one acre = 43,560 square feet

In order to meet the criteria of this section, the dispersal system may be moved to meet the minimum separation distance. This may require the use of an effluent pump system. Alternatively, if the minimum separation distance

Yellow highlight indicates changes made after the conclusion of the public hearing.

cannot be achieved, tertiary treatment may be installed. Other methods of providing equal protection will be considered on a case by case basis by the department.

Lots with existing liquid waste systems totaling less than 2000 gallons per day may be permitted to add additional liquid waste systems provided the individual systems do not exceed 2000 gallons per day, meet the setback requirements to the existing systems as allowed above and meet lot size requirements in Subsection C of 20.7.3.301 NMAC.

D. Disposal systems shall not be located in any flood irrigation area. The disposal system shall have a setback of 15 feet from the edge of the disposal system to the edge of the flood irrigation area.

E. If the department discovers that a private drinking water well on an offsite property has been drilled at a location that is not set back from a pre-existing liquid waste system by the distance required in Table 302.1, the department shall:

(1) send a certified letter to the owners of the water well and liquid waste system that identifies the subject water well and liquid waste system, and describes the potential hazards created by insufficient setback;

(2) provide the Office of the State Engineer with a copy of the letter; and

(3) not administer the water well setback requirements in Table 302.1 to the subject well provided that the liquid waste system remains in compliance with 20.7.3 NMAC, and is not modified.

[20.7.3.302 NMAC - Rp, 20.7.3.303 NMAC, 9/1/05; A, 4/1/07]

20.7.3.303 STANDARDS; CLEARANCE REQUIREMENTS:

A. Seasonal high ground water levels and seasonal high water flows shall be determined by the department either by direct observation, by the presence of mottling in the soil profile, by reliance upon the findings of a qualified professional or upon published scientific material, well records or other sources acceptable to the department. The department may adjust the measured water table to compensate for factors such as season, drought, irrigation or flooding. Compliance with seasonal high ground water table and seasonal high water flow clearances in this section shall be based on the best-documented evidence available to the department at the time of installation or modification.

B. No conventional on-site liquid waste system shall discharge liquid waste into the soil where the vertical clearance from the bottom of the absorption area to seasonal high ground water table, impervious formation or other limiting layer is less than four (4) feet of suitable soil. A reduction in this clearance may be allowed with appropriate advanced treatment or alternative disposal.

C. Unlined privy pits shall provide a clearance of no less than four (4) feet of suitable soil from the bottom of the excavation to the seasonal high ground water table, the seasonal high water flow, impervious formation or other limiting layer.

[20.7.3.303 NMAC - Rp, 20.7.3.304 NMAC, 9/1/05]

20.7.3.304 STANDARDS; PROHIBITIONS:

A. No person shall introduce into an on-site liquid waste system household hazardous wastes, solvents, fertilizers, livestock wastes, vehicle and equipment wash water or other materials of a composition or concentration not generally considered liquid waste as defined in 20.7.3 NMAC.

B. Liquid waste treatment additives shall not be used as a means to reduce the frequency of proper maintenance and removal of septage from a treatment unit.

C. Effluent shall not be combined and stored with any other source of water, either potable or non-potable.

[20.7.3.304 NMAC - Rp, 20.7.3 NMAC, 308, 309, 9/1/05]

20.7.3.305 STANDARDS; WASTE INTERCEPTORS:

A. When liquid wastes are discharged containing excessive amounts of grease, garbage, flammable wastes, sand or other ingredients that may affect the operation of an onsite liquid waste system, an interceptor for such wastes shall be installed in-line prior to the liquid waste treatment unit.

B. [Installation of such interceptors shall comply with the uniform plumbing code.] Installation of interceptors shall require a permit from the authorized building department.

C. [Interceptors shall be installed in locations that meet minimum setback and clearance requirements of Table 303.1.]

[D]C. Waste interceptors shall be maintained in accordance with manufacturer's specifications and require a maintenance contract to be in effect at all times.

[20.7.3.305 NMAC - Rp, 20.7.3.407 NMAC, 9/1/05]

20.7.3.306 STANDARDS; SEPTAGE: Disposal of septage shall occur only at a permitted facility with the knowledge and consent of the facility owner, and shall not cause a hazard to public health nor degrade a body of water. Transport and disposal of septage shall be in conformance with applicable federal, state and local regulations. Septage pumpers shall keep customer invoices and disposal records for three years and shall, upon written request by the department, make such records available to the department for inspection.

[20.7.3.306 NMAC - Rp, 20.7.3.307 NMAC, 9/1/05]

20.7.3.307 STANDARDS; ABANDONED SEWERS AND ON-SITE LIQUID WASTE SYSTEMS:

A. Every abandoned building sewer, or part thereof, shall be plugged or capped within five (5) feet of the property line using a cap or plug prescribed by the ~~[uniform]~~New Mexico plumbing code.

B. Every cesspool, holding tank, septic tank, seepage pit or other liquid waste treatment unit that has been abandoned or has otherwise been discontinued from further use or to which no waste or building sewer from a plumbing fixture is connected shall have the liquid waste pumped there from and properly disposed. The bottom of the unit shall be opened or ruptured, or the entire unit collapsed so as to prevent the unit from retaining water. The unit shall be completely filled with earth, sand, gravel, concrete or other approved material.

C. The top cover or arch over the cesspool, holding tank, septic tank, seepage pit or other liquid waste treatment unit shall be removed or collapsed before filling and the filling shall not extend above the top of the vertical portions of the sidewalls or above the level of any outlet pipe until inspection or authorization by the department. After such inspection or authorization, the cesspool, holding tank, septic tank, seepage pit or other liquid waste treatment unit shall be filled to the level of the top of the ground.

D. Where on-site treatment systems are abandoned consequent to connecting any premises with a public sewer, the permittee making the connection shall fill all abandoned treatment units as required by the department within 30 days from the time of connection.

[20.7.3.307 NMAC - Rp, 20.7.3.410 NMAC, 9/1/05]

20.7.3.308 through 20.7.3.400 [RESERVED]

20.7.3.401 PERMITTING; GENERAL REQUIREMENTS:

A. No person shall install or have installed a new on-site liquid waste system or modify or have modified an existing on-site liquid waste system, unless that person obtains a permit issued by the department, including payment of the permit fee, prior to construction of such installation or modification. Failure to obtain the required permit may result in the initiation of enforcement actions by the department.

B. No person shall construct or modify a residential or commercial unit on, or transport a residential or commercial unit onto, a lot for which an on-site liquid waste system is required unless the department has issued an on-site liquid waste system permit prior to such construction, modification or transportation.

C. No person shall construct, install or modify an on-site liquid waste system unless that person holds a valid and appropriate classification of contractor's license issued by the New Mexico construction industries division, except that a qualified homeowner may install or modify permitted septic tanks and conventional trench or bed disposal fields ~~[pursuant to Section 904]~~. Obtaining a permit from the department for the installation or modification of an on-site liquid waste system does not relieve any person from the responsibility of obtaining any other approval, license or permit required by state, city or county regulations or ordinances or other requirements of state or federal laws.

D. A permit is not required for graywater discharges or for systems designed for the discharge of graywater that meet the requirements of 20.7.3.810 NMAC.

E. ~~[Any person]~~An applicant seeking a permit shall do so by submitting an application to the field office of the department having jurisdiction for the area where the system is to be installed or modified. The application shall be:

(1) made on a form provided by the department;
(2) accompanied by the recorded deed or other recorded description and such other relevant information as the department may reasonably require to establish lot size, boundaries, date of record and ownership; and

(3) signed by the applicant or their authorized representative.

F. The department shall require complete and accurate information before a permit is issued for an on-site liquid waste system.

Yellow highlight indicates changes made after the conclusion of the public hearing.

G. The department shall deny the application if the proposed system will not meet the requirements of 20.7.3 NMAC.

H. The department shall maintain a file of all permits issued and applications denied. The file shall be open for public inspection.

I. All systems shall be installed, operated and maintained in accordance with the permit and applicable regulations.

J. Unpermitted conventional systems installed or modified prior to February 1, 2002 may be issued a certificate of registration for continued operation if, after evaluation by the department or by an installer specialist qualified person:

(1) the treatment unit is pumped by a septage pumper hired by the system owner ~~[and inspected by the department]~~ and the unit is determined to be watertight, is functioning properly and the tank has a liquid capacity within one tank size of the capacity required in Subsection Q of 20.7.3.201 NMAC;

(2) the liquid waste system ~~[meets the]~~ appears to meet setback and clearance requirements [in effect at the time of the initial installation] based on ~~[an]~~ a non-intrusive [inspection] evaluation;

(3) the ~~[treatment unit and]~~ disposal system appears to be functioning properly; ~~[and]~~

(4) meets the lot size requirements of the regulation in effect at the time of the initial installation, or in effect at the time of the most recent permitted modification;

(5) the system does not constitute a public health or safety hazard; and

~~[(4)]~~ (6) the appropriate permit fee is paid for the system installed.

If any of the above conditions are not met, a certificate of registration cannot be issued and an application for modification pursuant to Section 20.7.3.202 NMAC must be submitted.

K. Unpermitted conventional systems installed or modified on or after February 1, 2002 may be permitted if:

(1) the treatment unit and the disposal system are adequately exposed to allow full inspection by the department to determine all relevant aspects of construction and materials, including, but not limited to: soil type; pipe size, type and material; proper placement of aggregate and cover; and proper trench size, slope and spacing;

(2) the on-site liquid waste system is determined, upon inspection by the department, to meet all requirements of 20.7.3 NMAC; and

(3) the appropriate permit fee is paid; and

(4) at the discretion of the department, an administrative penalty is paid in accordance with Environmental Improvement Act, Chapter 74, Article 1 NMSA 1978.

L. If the department finds that specific requirements in addition to, or more stringent than, those specifically provided in 20.7.3 NMAC are necessary to prevent a hazard to public health or the degradation of a body of water, the department shall issue permit conditions with more stringent requirements or additional specific requirements. Such additional or more stringent requirements may apply to system design, siting, construction, inspection, operation and monitoring.

M. The installation or modification of an on-site liquid waste system shall be in accordance with the permit and all regulatory requirements of 20.7.3 NMAC. Any change from the permitted installation or modification, including a change of ~~[contractor]~~ installer, must receive department approval prior to implementation. An amendment of to the permit shall be submitted within seven (7) days of the completion of the installation.

N. No person shall operate or use an on-site liquid waste system until the department has granted final approval of the system after installation or modification of the system is completed. No person shall occupy a newly constructed or transported dwelling for which an on-site liquid waste system is required until the department has granted such final approval and, if applicable, until the governmental body with authority to regulate construction has granted an occupancy permit. The department shall not grant final approval if the system as installed or modified does not meet the requirements of 20.7.3 NMAC.

O. The department may cancel a permit if the installation or modification of the on-site liquid waste system has not been completed within one (1) year after issuance or if the department determines that material information in the application is false, incomplete or inaccurate and that the correct information would have resulted in the department denying the original application. If a permit is canceled, the department shall notify the permittee of the decision in writing and the reason for cancellation and appropriate regulations cited.

P. Only the permittee may request that the department cancel a permit. The request must be made in writing.

Q. An installer whose New Mexico construction industries division license number is on a permit approved by the department for construction may, upon written notice to both the permittee and to the department, withdraw from the permit. Upon installer withdrawal, the permit approval shall be suspended until the permittee

amends the permit either to include another licensed installer or to reflect approval as a qualified homeowner in accordance with Subsection A of 20.7.3.904 NMAC. Construction of the liquid waste system shall not proceed until the permit amendment is approved by the department. If the contractor withdraws after construction has commenced, the owner shall eliminate any public safety hazards posed by open treatment systems, excavations or other conditions related to unfinished construction.

R. A permittee may amend their permit to change the installer without installer withdrawal, provided that the permittee provides written notice to the installer.

[20.7.3.401 NMAC - Rp, 20.7.3.201 NMAC, 9/1/05; A, 4/1/07; A, 11/21/11]

20.7.3.402 PERMITTING; CONVENTIONAL TREATMENT AND DISPOSAL SYSTEMS:

A. For liquid waste systems utilizing conventional treatment and conventional disposal, the department [may]shall require the following information to be included with the application.

(1) A detailed site plan, completely dimensioned, showing direction and approximate slope of surface; location of all present or proposed retaining walls; arroyos, canals, irrigation or drainage channels; water supply lines, wells or other water sources; other on-site liquid waste systems; paved areas, roadways and structures; location of the proposed liquid waste system and replacement area with relation to lot lines and structures; and to all sources of water supply located within two-hundred (200) feet.

(2) Sufficient details of construction, materials and components necessary to assure compliance with the requirements of 20.7.3 NMAC.

(3) [A detailed log of soil formations and ground water level as determined by soil borings or a test hole(s) dug in close proximity to any proposed seepage pit or disposal field.

(4) —]A set of floor plans or verification of the total flow for the structure(s) served by the liquid waste system.

The department may also require the following information be included with the application:

(1) A detailed log of soil formations and ground water level as determined by soil borings or a test hole(s) dug in close proximity to any proposed seepage pit or disposal field.

([5]2) Any additional information that may be necessary to demonstrate that the permit will not create a hazard to public health or degrade a body of water.

B. Except as otherwise provided in Subsection C of this section, the department shall, within ten (10) working days after receipt of the completed application, grant the permit, grant the permit subject to conditions or deny the permit and shall notify the applicant of the action taken. Within five working days, the department shall determine if a permit application is administratively complete. The department shall notify the applicant, orally or in writing, if the application is administratively incomplete. The determination that an application is administratively complete does not mean that the proposed system meets the requirements of 20.7.3 NMAC.

C. If the department's initial review of the application indicates that the imposition of more stringent requirements may be necessary pursuant to Subsection [M]L of 20.7.3.201 NMAC or Subsection L of 20.7.3.401 NMAC, the department may extend the time for the review of the application until twenty (20) working days after receipt of the completed application provided that the department shall notify the applicant of such extension within ten (10) working days after receipt of the completed application.

D. When the permit is granted subject to conditions, denied or more stringent conditions applied, the reason for the action shall refer to the appropriate regulation(s) and be given in writing.

[20.7.3.402 NMAC - Rp, 20.7.3.201 NMAC, 9/1/05; A, 11/21/11]

20.7.3.403 PERMITTING; ADVANCED TREATMENT OR ALTERNATIVE DISPOSAL:

A. An application for a permit proposing advanced treatment (with conventional or alternative disposal) or alternative disposal (with conventional treatment) may be submitted.

B. Applications shall include the information required for a conventional treatment or disposal system, and:

(1) for applications proposing advanced treatment with either conventional or alternative disposal:

(a) the applicant shall demonstrate that the system has been approved by the department and shall include operation and maintenance information, monitoring plans and maintenance agreements;

(b) the applicant must demonstrate the applicability and effectiveness of the technology on the site where it is to be used;

(c) a copy of all signed maintenance and sampling contracts [between the property owner and a certified maintenance service provider] shall be attached to the application. The effective date of the maintenance and sampling contracts shall be the day of final permit approval;

(d) the property owner shall have all maintenance and sampling contracts in effect for the duration of the permit; and

(e) the property owner shall provide to the department copies of all maintenance and sampling contracts within 30 days of contract issuance or renewal; and

(2) for applications proposing alternative disposal with conventional treatment, the applicant shall include details of design, sizing, construction and operation. Such disposal systems include, but are not limited to, mounds, evapotranspiration systems, ~~[seepage pits]~~, pressure dosed systems, alternating ~~[leach fields]~~ drainfields, non-discharging constructed wetlands, non-gravity systems and approved surface applications.

C. For applications proposing advanced treatment or alternative disposal, the department shall, within ten working days, the department shall determine if a permit application for advanced treatment or alternative disposal is administratively incomplete. The department shall notify the applicant, orally or in writing, if the application is administratively incomplete. The determination that an application is administratively complete does not mean that the proposed system meets the requirements of 20.7.3 NMAC. Within twenty (20) working days after receipt of the administratively completed application, the department shall grant the permit, grant the permit subject to conditions or deny the permit and shall notify the applicant of the action taken. Within ten working days, the department shall determine if a permit application for advanced treatment or alternative disposal is administratively incomplete. The department shall notify the applicant, orally or in writing, if the application is administratively incomplete. The determination that an application is administratively complete does not mean that the proposed system meets the requirements of 20.7.3 NMAC.

D. When the permit is granted subject to conditions or the application denied, the reason for the action shall refer to the appropriate regulation(s) and be given in writing.

E. For advanced treatment systems, the authorization to operate the system shall be valid until a change of ownership of the system occurs. At the time of transfer of ownership, the new owner shall submit an amendment of permit updating the ownership change and also provide the department a copy of the valid maintenance and sampling contract in the name of the new owner.

[20.7.3.403 NMAC - N, 9/1/05; A, 4/1/07]

20.7.3.404 PERMITTING; EXPERIMENTAL AND CONDITIONAL APPROVED SYSTEMS HAVING RECEIVED EXPERIMENTAL OR CONDITIONAL APPROVAL:

A. The department may issue a permit, on an individual basis, for the installation of an onsite liquid waste system that has received experimental or conditional approval ~~ed on-site liquid waste system~~. The permit applicant must demonstrate that the proposed system, by itself or in combination with other on-site liquid waste systems, will neither cause a hazard to public health nor degrade a body of water and that the proposed system will provide a level of treatment at least as effective as that provided by on-site liquid waste systems, except privies and holding tanks, that meet the requirements of 20.7.3 NMAC.

B. Prior to the approval of a permit for an onsite liquid waste system that has received experimental or conditional approval ~~ed on-site liquid waste system, the experimental or conditional approved~~ the system shall be reviewed by the wastewater technical advisory committee pursuant to 20.7.3.905 NMAC.

C. A field demonstration, which meets the following requirements, shall be required for a system proposed for experimental approval ~~ed system~~.

(1) Conditions for installation, operation, maintenance and monitoring at the proposed demonstration site shall be reviewed and approved by the department. Systems with experimental approval ~~ed systems~~ may only be installed on lots where a conventional system would be allowed.

(2) On-site testing and evaluation, as required by the department and paid for by the permit applicant, shall be performed for a period [specified] recommended by the wastewater technical advisory committee and adopted by the department. The results of the evaluation period shall be forwarded to the wastewater technical advisory committee for review and further action.

D. (1) A contingency plan shall be included to provide liquid waste treatment that meets the requirements of 20.7.3 NMAC if the system with experimental or conditional approval ~~ed system~~ fails to meet the requirements of 20.7.3 NMAC.

(2) A copy of a signed maintenance contract and sampling contract, if applicable, between the property owners and a certified maintenance service provider shall be attached. The property owner shall have a maintenance contract in effect for the duration of the permit. The property owner shall provide to the department copies of all maintenance contracts required to be in effect within 30 days of contract issuance or renewal.

[20.7.3.404 NMAC - Rp, 20.7.3.306 NMAC, 9/1/05]

20.7.3.405 PERMITTING; VARIANCES:

A. Any person seeking a variance from the requirements contained in 20.7.3 NMAC shall do so by filing a written petition with the field office of the department having jurisdiction for the area where the system is to be installed.

B. The petition shall be made on a form provided by the department, signed by the petitioner or an authorized representative and accompanied by relevant documents or materials that supports the petitioner's request for a variance. The petitioner shall give notice to all landowners sharing a common boundary and within 100 feet when sharing a common right-of-way. If no property boundary is within 1000 feet of the system, notification is not required, except as otherwise provided in this part. In addition, all parties sharing a private [domestic well] or public water supply source located on the lot where the variance is proposed shall be notified. Said notice shall include the nature of the variance petition, the date of submission of the petition to the department, the address of the department field office to which the petition is being submitted and the time frame for department action as provided in Subsection D of 20.7.3.405 NMAC below.

C. Upon review of the petition, the department may require the submittal of other relevant information to provide reasonable assurance that the conditions set forth in Paragraphs (1) and (2) of Subsection E of 20.7.3.405 NMAC are met.

D. The department shall, after a minimum of ten (10) but not more than twenty (20) working days following receipt of the completed petition, grant the variance, grant the variance subject to conditions or deny the variance and shall so notify the applicant and any other person making a written submission concerning the petition. The reason for the department's action shall be provided in writing and the appropriate regulations cited.

E. The department shall deny the variance petition unless the petitioner establishes by clear and convincing evidence that:

(1) the proposed on-site liquid waste system will, by itself or in combination with other on-site liquid waste systems or other discharges subject to 20.6.2.3000 through 20.6.2.3114 NMAC, neither cause a hazard to public health or degrade any body of water; and

(2) granting the variance will result in public health and environmental protection equal to or greater than the minimum protection provided by the varied requirement.

F. The department shall maintain a file of all variances granted and denied. The file shall be open for public inspection.

[20.7.3.405 NMAC - Rp, 20.7.3.202 NMAC, 9/1/05; A, 4/1/07]

20.7.3.406 PERMITTING; APPEALS:

A. Any affected person who is dissatisfied with action taken by the department on a permit application or variance petition may appeal to the secretary. The request must be made in writing to the secretary within fifteen (15) working days after notice of the department's action has been issued. Unless an appeal is received by the secretary within fifteen (15) working days after notice to the applicant or petitioner of the department's action, the decision of the department shall be final.

B. If an appeal is received within the fifteen (15) working day time limit, the secretary shall hold a hearing within fifteen (15) working days after receipt of the request. The secretary shall notify the person who requested the hearing of the date, time and place of the hearing by certified mail. If the appeal is on a variance petition, the secretary shall also notify all persons involved under Subsection B of 20.7.3.405 NMAC of the hearing date, time and place of the hearing by certified mail.

C. In the appeal hearing, the burden of proof is on the person who requested the hearing. Where the department requires more stringent requirements pursuant to Subsection [M]L of 20.7.3.201 NMAC, the burden of proof of the necessity for the more stringent requirements shall be upon the department.

D. Appeal hearings shall be held at a place designated by the secretary in the area where the proposed on-site liquid waste system is to be located, unless other mutually agreed upon arrangements are made. The secretary may designate a person to conduct the hearing and make a final decision or make recommendations for a final decision. The secretary's hearing notice shall indicate who will conduct the hearing and make the final decision.

E. Upon request, the hearing shall be recorded. The person who requests the recording shall pay recording costs.

F. In appeal hearings, the rules governing civil procedure and evidence in district court do not apply. Hearings shall be conducted so that all relevant views, arguments and testimony are amply and fairly presented without undue repetition. The secretary shall allow department staff and the hearing requestor to call and examine witnesses, to submit written and oral evidence and arguments, to introduce exhibits and to cross-examine persons

who testify. All testimony shall be taken under oath. At the end of the hearing, the secretary shall decide and announce if the hearing record will remain open and for how long and for what reason it will be left open.

G. Based upon the evidence presented at the hearing, the secretary shall sustain, modify or reverse the action of the department. The secretary's decision shall be by written order within fifteen (15) working days following the close of the hearing record. The decision shall state the reasons therefore and shall be sent by certified mail to the hearing requestor and any other affected person who requests notice. Appeals from the secretary's final decision are by Rule 1-075 NMRA.

[20.7.3.406 NMAC - Rp, 20.7.3.203 NMAC, 9/1/05]

20.7.3.407 through 20.7.3.500 [RESERVED]

20.7.3.501 DESIGN; LIQUID WASTE TREATMENT UNITS; GENERAL:

A. Plans for treatment units, including septic tanks, shall be submitted to the department for approval and certification. Such plans shall show all dimensions, reinforcement, structural calculations and such other pertinent data as may be required by the department. Plans for advanced treatment units shall be submitted to the department for review by the wastewater technical advisory committee pursuant to 20.7.3.905 NMAC. Plans for advanced treatment units shall meet the requirements set forth by the wastewater technical advisory committee. All plans and structural calculations shall be stamped by a professional engineer.

(1) Septic tanks shall be recertified on an annual basis. A recertification fee is required pursuant to 20.7.11.9 NMAC. Failure to recertify shall result in the suspension of department approval.

(2) Failure of the manufacturer of an advanced treatment unit to comply with the conditions of their approval shall result in the suspension of department approval for the advanced treatment unit.

B. All treatment units and tanks, regardless of material or method of construction and unless otherwise specified in 20.7.3 NMAC, shall:

(1) be designed and constructed to withstand all reasonable lateral earth pressures under saturated soil conditions with the tank empty;

(2) ~~[have]~~support a minimum live load at the surface of 300 pounds per square foot with ~~[twelve (12) inches]~~three feet of cover unless heavier loads are expected;

(3) not be subject to excessive corrosion or decay;

(4) have the manufacturer's name, New Mexico registration number, year of construction and tank capacity in gallons permanently displayed on the tank above the outlet pipe;

(5) be watertight;

(6) not be constructed or manufactured on site, in the ground, when saturated soil conditions during construction are closer than three (3) inches to the bottom of the excavation;

(7) be protected against flotation under high ground water conditions and for units installed in floodplains;

(8) be installed so that they are easily locatable and accessible; ~~[and]~~

(9) be approved by the international association of plumbing and mechanical officials (IAPMO); or meet IAPMO minimum standards as demonstrated to the department by approved laboratory testing; or meet all requirements of Sections 20.7.3.501 and 502 NMAC as certified by a professional engineer; or be recommended by the wastewater technical advisory committee and approved by the department~~[-]; and~~

(10) all access risers shall be attached to the treatment unit with a watertight seal.

C. Treatment units may be constructed of the following materials:

(1) precast reinforced concrete;

(2) poured-in-place concrete;

(3) fiberglass;

(4) polyethylene; or

(5) other materials as approved in writing by the department.

D. Metal, wooden, concrete block and homeowner built tanks are prohibited.

E. A secure lid shall consist of one or more of the following:

(1) a padlock;

(2) a twist lock cover requiring special tools for removal;

(3) covers weighing 58 pounds or more, net weight;

(4) a hinge and hasp mechanism that uses stainless steel or other corrosion resistant fasteners to fasten the hinge and hasp to the lid and tank for fiberglass, metal or plastic lids; or

(5) other mechanisms approved by the department.

F. Wherever vehicular traffic is anticipated to cross over the liquid waste treatment unit, pump station or pump chamber, the unit shall be designed by a professional engineer to withstand the anticipated traffic loading.

G. All solid wall pipe connections, fittings and penetrations shall be watertight.

H. Each tank shall be structurally designed to withstand all anticipated earth or other loads. All septic tank covers shall be capable of supporting an earth load of not less than three hundred (300) pounds per square foot when the maximum fill coverage does not exceed three (3) feet. All access riser covers shall be capable of supporting a live load of not less than 300 pounds per square foot.

I. Fiberglass or reinforced plastic ~~[treatment units]~~ septic tanks shall be certified to IAPMO standards. Fiberglass or plastic septic tanks shall be installed according to the manufacturer's instructions. A copy of the manufacturer's installation instructions shall be available for inspection by the department at the installation site.

J. Concrete liquid waste treatment units.

(1) Minimum concrete thickness.

(a) Walls: Two and one-half (2 1/2) inches in thickness.

(b) Floors: Three (3) inches in thickness.

(c) Covers: Three (3) inches in thickness.

(2) Floors shall be an integral part of the tank.

(3) Where sections are used, tongue and groove joints or keyways shall be used and shall be sealed with an approved sealer and shall be watertight.

(4) Poured-in-place tanks shall be designed and certified by a professional engineer.

(5) All concrete liquid waste treatment units, except those approved for use utilizing concrete meeting type V specifications, shall be protected from corrosion by coating internally with an approved bituminous coating or by other acceptable means. The coating shall cover all exposed concrete and shall extend to at least 6 inches below the waterline.

(6) Treatment unit construction materials shall meet the following minimum specifications:

(a) concrete strength – ~~[3500]~~ 4000 psi @ 28 days, density 140 PCF;

(b) cement Portland type II or V per the latest version of ASTM specifications C150-
[04ae1]07, or most recent version;

(c) admixtures per the latest version of ASTM specifications C233 ~~[04]11, or most recent~~
version; and

(d) reinforcing per the latest version of ASTM specifications A615/A615M-08b, or most recent
version, for ~~[wire fabric]~~ steel bars, grade 40/60 [R'd] or equivalent.

(7) Be installed level on undisturbed or compacted soil, 1/4 - 3/4 inch pea gravel or sand.
[20.7.3.501 NMAC - Rp, 20.7.3.402 NMAC, 9/1/05; A, 4/1/07]

20.7.3.502 DESIGN; CONVENTIONAL TREATMENT UNITS; CONSTRUCTION STANDARDS:

A. All conventional treatment units, regardless of material or method of construction and unless otherwise specified in this part, shall be designed to produce a clarified effluent and shall provide adequate space for sludge and scum accumulations based on a minimum hydraulic retention time of 24 hours at maximum sludge depth and scum accumulation.

B. Septic tanks shall have a minimum of two (2) compartments. The inlet compartment of a septic tank shall be two-thirds (2/3) of the total liquid capacity of the tank, but not less than five-hundred (500) gallons liquid capacity, and shall be at least three (3) feet in width and five (5) feet in length. Liquid depth shall be not less than two (2) feet and six (6) inches nor more than six (6) feet. The second compartment of a septic tank shall have a liquid capacity of one-third (1/3) of the total capacity of such tank. In septic tanks having over fifteen hundred (1500) gallons capacity, the second compartment may not be less than three (3) feet in length.

C. Multiple tanks installed in series may be allowed with department approval provided the total tank volume is at least 2.5 times the ~~[total]~~ system design flow. Minimum tank sizes are as follows:

(1) for flows up to 1000 gpd, the capacity of each tank must be at a minimum 900 gallons; and

(2) for flows between 1000 and 2000 gpd, the capacity of each tank must be a minimum of 1200 gallons.

D. Access to each septic tank shall be provided by at least two access openings, each of which shall be at least twenty (20) inches in minimum dimension. One access opening shall be placed over the inlet and one access opening shall be placed over the outlet. Whenever a first compartment exceeds twelve (12) feet in length, an additional access opening shall be provided over the baffle wall. Each access opening shall be extended to the

surface of the ground with a secure lid. These ~~[extensions]~~access risers shall be twenty-four (24) inches in diameter for depths of 0-3 feet and for depths greater than 3 feet shall be at least 30 inches in diameter ~~[with an approved lid that conforms to Subsection E of 20.7.3.501 NMAC]~~. If the ~~[extensions]~~access risers are made of concrete, they shall be coated with a coating approved by the department. "Wet-or-dry" coatings and mastics, or other water-based materials are not acceptable. ~~[Materials for the extensions shall be approved by the department.]~~Risers shall be constructed of precast concrete, premanufactured plastic made for risers, culvert or double wall high density polyethylene or equivalent plastic with proper covers or lids. Rain barrels, trash cans or 55-gallon drums or other inappropriate materials are not acceptable riser material.

E. The inlet and outlet pipe openings shall be not less in size than the connecting sewer pipe and shall have a watertight seal approved by the department. The vertical leg of round inlet and outlet fittings shall not be less in size than the connecting sewer pipe nor less than four (4) inches. A baffle type fitting shall have the equivalent cross-sectional area of the connecting sewer pipe and not less than a four (4) inch horizontal dimension when measured at the inlet and outlet pipe inverts, unless it is a pumped system.

F. The inlet and outlet pipe or baffle shall extend at least four (4) inches above and at least twelve (12) inches below the water surface. The invert of the inlet pipe shall be at a level not less than two (2) inches above the invert of the outlet pipe. Inlet and outlet pipe or baffles shall be, at a minimum, schedule 40 PVC, ABS or cast-in-place concrete. ~~[Such approved pipe shall be SDR 35 or better.]~~

G. Inlet and outlet pipe fittings or baffles and compartment partitions shall have a free vent area equal to the required cross-sectional area of the building sewer or private sewer discharging into the septic tank to provide free ventilation above the water surface from the disposal field or seepage pit through the septic tank, building sewer and stack to the outer air.

H. All septic tanks shall include an effluent filter approved by the department, installed on the outlet of the tank before final discharge, with an access riser installed to grade, and with a handle extending to within six inches of the top of the riser.

I. The sidewalls, except on cylindrical tanks, shall extend at least nine (9) inches above the liquid depth. The cover of the septic tank shall be at least two (2) inches above the back vent openings.

J. Partitions or baffles between compartments shall be of solid, non-corrosive, durable material and shall extend at least four (4) inches above the water level. Metal or wooden baffles are prohibited.

(1) An inverted fitting equivalent in size to the tank inlet, but in no case less than four (4) inches in size, shall be installed in the inlet compartment side of the baffle with the bottom of the fitting placed midway in the depth of the liquid.

(2) If a horizontal slot is used, the slot shall extend the width of the tank, be no more than 6 inches in height and located midway in the depth of the liquid.

K. Fiberglass or reinforced plastic tanks shall be certified to current IAPMO standards.

(1) Each access and inspection hole cover shall have approved fasteners not subject to deterioration by liquid or gases normally present in septic tank systems to assure that the covers will remain in place. All covers shall overlap the hole by a minimum of two (2) inches in all directions.

(2) Each tank shall be free from visual defects such as foreign inclusions, dry spots, air bubbles, pimples and delamination. The inner and outer surfaces shall have a smooth, continuous finish with no exposed fibers. Both the inner and outer surfaces shall have a continuous resin rich surface and no fibers shall be exposed either directly from cracks, porosity or holes, or indirectly through bubbles that may break and expose fibers. [20.7.3.502 NMAC - Rp, 20.7.3.402 NMAC, 9/1/05]

20.7.3.503 DESIGN; PUMP STATIONS AND EQUIPMENT:

A. Pump stations or pump chambers shall be watertight and shall be constructed of concrete, plastic, fiberglass or other approved material. Tanks and chambers shall be designed and constructed so as to serve their intended purpose, meet appropriate material and structural requirements equal to those required of septic tanks as described in 20.7.3.501 NMAC, and appropriately coated to resist corrosion with the exception of concrete tanks constructed of type V concrete. Tanks are subject to water tightness testing at the department's discretion.

B. All valves, motors, pumps, aerators and other mechanical or electrical devices shall be located where they will be accessible for inspection and repair at all times without requiring entry into the tank and protected with a locking removable cover on an access port of at least 20 inches in minimum dimension. Concrete tanks and chambers may have covers of at least 58 pounds in place of a cover and locking mechanism.

C. Pumps stations or pump chambers shall be equipped with both audible and visible alarms, or remote and visual alarms, for high water and pump failure. All alarm and control circuits shall be on a separate

circuit from pumps and shall be contained in weather-proof control boxes or located inside a building or other weather-proof structure. Alarms shall be placed in a conspicuous location approved by the department.

D. Pumps and equipment shall be designed to pump sewage, septic effluent or treated wastewater as appropriate and shall be sized to serve their intended purpose.

E. Pump stations or pump chambers shall be installed level. Pump chambers shall be a single compartment with a 500 gallon minimum useful volume, and allowance to be made for tank volume between the pump intake and tank floor. For septic tank effluent, a separate pump chamber, in addition to the septic tank, is required. Pump chambers for systems in type IV soils shall have a liquid volume equal to the required septic tank liquid volume.

F. Pump controls shall be set so that the pump tank or chamber is never more than half full and pumps shall be controlled so that no more than one-fourth of the design capacity is pumped in one hour and no more than the daily design flow is pumped in any given twenty-four hour period. Pumps shall be installed at least six inches off the floor of the tank.

G. The system shall be designed to prevent freezing of pipes where necessary by draining of supply lines back to the tank by use of a freeze control valve or other approved means and designed to prevent siphoning from the tank by downgrade dispersal systems by means of an one-eighth to three-sixteenth inch anti-siphon hole in the piping inside the tank. The system shall also be designed to prevent siphoning of the dispersal area back to the tank by use of a check valve or other approved means.

H. Flow equalization tanks shall meet all requirements of pump stations and pump chambers.
[20.7.3.812 – Rp 20.7.3.402 NMAC, 9/1/05; xxxxxxxxxx]

20.7.3.504 DESIGN; BUILDING SEWER:

A. The building sewer connects the building drain to the septic tank or liquid waste treatment unit. Horizontal building sewer piping shall be run in practical alignment and a uniform slope of not less than one-fourth (1/4) of an inch per foot or two percent (2%) toward the point of disposal provided that where it is impractical due to the structural features or arrangement of any building or structure to obtain a slope of one-fourth (1/4) of an inch or two percent (2%), any such pipe or piping four (4) inches in diameter or larger may have a slope of not less than one-eighth (1/8) of an inch per foot or one percent (1%), when first approved by the department.

B. Each horizontal sewer pipe shall be provided with a cleanout at its upper terminal and each run of pipe that is more than one hundred (100) feet in length shall be provided with a cleanout for each one hundred (100) feet or fraction thereof. Cleanouts shall be installed pursuant to the New Mexico plumbing code.

C. Sewer piping shall be an approved material having a smooth uniform bore. Vitrified clay pipe or fittings shall not be used above ground or where pressurized by a pump or ejector. Vitrified clay pipe or fittings shall be a minimum of twelve (12) inches below ground.

[20.7.3.813 – Rp, 20.7.3.402 NMAC, 9/1/05; xxxxxxxxx]

20.7.3.[503]505 through 20.7.3.600 [RESERVED]

20.7.3.601 DESIGN; ADVANCED TREATMENT SYSTEMS; GENERAL:

A. The level of treatment required and the type of disposal allowed shall be determined by the site evaluation and the character of the waste to be treated and disposed using 20.3.7.605 NMAC. A liquid waste system with an approved non-discharging disposal design may be installed in lieu of the required advanced treatment system.

B. Prior to installation, [A]all proprietary treatment systems proposed for secondary or tertiary treatment must ~~[meet]~~ be capable demonstrate the capability of meeting the performance standards of 20.7.3.602-604 NMAC, ~~[and]~~ must be ~~[certified]~~ recommended for approval by the ~~wasterwater~~ wastewater technical advisory committee ~~[for that level of treatment]~~ and approved by the secretary of the department. Manufacturers of advanced treatment systems must comply with all conditions set by the department.

C. Any design of a conventional or advanced treatment system with site or other limiting conditions that cannot be addressed by following a standard design from alternative resources recognized by the department shall be designed and sealed by a professional engineer.

D. Ventilation of treatment units providing advanced treatment shall be in accordance with the manufacturer's recommendation.

E. If an adequate sampling port or sampling point is not provided in the design of an advanced treatment system, the installer shall provide an acceptable sampling port in the effluent line for the treatment unit. The installer may propose a sampling port configuration.

Yellow highlight indicates changes made after the conclusion of the public hearing.

(1) An acceptable sampling port for a residential unit may be manufactured from an 8-inch diameter pipe. The sample port shall be watertight. The water depth in the pipe shall be at least 4 inches. The outlet will be 1 inch lower than the inlet.

(2) If there are significant settled solids in the sampling well, the sampler shall clean out the sampling port. The sample can be collected either from the influent overflow or from the water collected in the sample port after cleaning.

[20.7.3.601 NMAC - N, 9/1/05; A, 4/1/07]

20.7.3.602 DESIGN; SECONDARY TREATMENT STANDARDS:

A. Secondary treatment systems shall produce an effluent that meets the following requirements:

(1) 5-day biochemical oxygen demand [not to exceed a 6 sample rolling average] of 30 mg/l [with no single sample to exceed 60 mg/l]; and

(2) total suspended solids [not to exceed a 6 sample rolling average] of 30 mg/l [with no single sample to exceed 60 mg/l].

B. Secondary treatment systems [and the disposal from secondary treatment systems shall meet the specific site conditions] may be installed to overcome site conditions set forth in 20.7.3.605 NMAC.

C. The treatment unit shall be operated in accordance with manufacturer's specifications and department approval conditions.

[20.7.3.602 NMAC - N, 9/1/05]

20.7.3.603 DESIGN; TERTIARY TREATMENT STANDARDS:

A. Tertiary treatment systems shall provide [nutrient]total nitrogen (TN) removal in addition to secondary treatment.

B. For lots that exceed the allowable hydraulic loading pursuant to Subsection C of 20.7.3.301 NMAC, a department approved tertiary treatment unit may be installed. The treatment unit must be capable of removing TN to a concentration equal to or less than the concentration limit calculated pursuant to 20.7.3.603.C NMAC.

C. Utilizing the standard loading equation, (flow (gpd) X conc. (mg/l) X 8.34 lbs./gal. X 365 days/yr) / 1,000,000 = lbs./yr/ac., and assuming an average of 60 mg/l of TN in the septic tank effluent and a maximum flow of 500 gpd/ac, the following simplified equation shall be used for determining the required TN concentration allowed for a specific lot size: total nitrogen concentration (in mg/l) = [lot size (in acres) / design flow (in gpd)] x 30,000. The concentration limit shall be based on a 6 sample rolling average with no single sample exceeding twice the concentration limit.

D. [Tertiary treatment systems and the disposal from tertiary treatment systems shall meet the specific site conditions set forth in 20.7.3.605 NMAC.]

The treatment unit shall be operated in accordance with manufacturer's specifications and department approval conditions.

E. TN effluent testing, when required pursuant to 20.7.3.901.C NMAC, shall meet the concentration limit calculated pursuant to 20.7.3.603.C NMAC as approved by the department. The concentration limit shall be based on a 6-sample rolling average with no single sample exceeding twice the concentration limit.

[20.7.3.603 NMAC - N, 9/1/05]

20.7.3.604 DESIGN; DISINFECTION TREATMENT STANDARDS:

A. Systems requiring disinfection shall provide treated effluent that shall not exceed [200]126 colony forming units (CFUs) of [fecal coliform]E. coli bacteria per 100 ml.

B. Disinfection is required to meet the specific site conditions set forth in 20.7.3.605 NMAC.

C. When disinfection is required, the effluent shall be subject to a minimum of secondary treatment prior to disinfection.

[20.7.3.604 NMAC - N, 9/1/05]

20.7.3.605 DESIGN; MINIMUM REQUIRED TREATMENT LEVELS FOR SITE CONDITIONS:

A. The required level of treatment shall be based on the most restrictive combination of siting conditions.

B. The following treatment levels are required for the soil types as described in Table 703.1:

- 1 (1) type Ia - secondary treatment and disinfection except as noted in Subsection F of 20.7.3.703
2 NMAC;
3 (2) type Ib, II, and III - primary treatment; and
4 (3) type IV - primary treatment with an appropriate disposal method as approved by the department.
5 C. The following treatment levels are required for the depth of suitable soil:
6 (1) greater than or equal to 4 feet of suitable soil - primary treatment;
7 (2) 1 to less than 4 feet of suitable soil - secondary treatment and disinfection; and
8 (3) no discharge with less than 1 foot of suitable soil to groundwater, karst or fractured bedrock.
9 D. The following treatment levels are required for hydraulic loading rates and lot size:
10 (1) less than or equal to 500 gallons per day per acre with a minimum lot size of 0.75 acre - primary
11 treatment; and
12 (2) greater than 500 gallons per day per acre or less than 0.75 acre - tertiary treatment.
13 (3) For lots less than 3/4 acre overlaying [~~naturally occurring~~] anoxic groundwater, secondary
14 treatment shall be required and tertiary treatment may be required. To be exempt from tertiary treatment
15 requirements, the permit applicant shall show by clear and convincing evidence that the discharge of liquid waste
16 shall not degrade a body of water.

17 E. The following treatment levels are required for a reduction in the drainfield setback distance to a
18 drinking water well:

- 19 (1) 50 feet or greater to a private drinking water well located on the subject property – tertiary
20 treatment and disinfection.
21 (2) A variance is required and tertiary treatment and disinfection is required for any reduction in
22 setback distance to:
23 (a) any private drinking water well located on the subject property less than 50 feet from the
24 disposal system;
25 (b) any private drinking water well not located on the subject property; or
26 (c) any public drinking water well.

27 F. A non-discharging system may be used in lieu of advanced treatment.
28 [F]G. A mound system or an elevated system in accordance with 20.7.3.[807]806 NMAC may be used
29 to meet clearance requirements or to overcome soil type limitations in lieu of advanced treatment. A sand-lined
30 trench or bottomless sand filter in accordance with 20.7.3.813 NMAC may be used to meet clearance requirements
31 in lieu of advanced treatment.

32 [G]H. If the existing level of nitrate-N in the groundwater exceeds 5 mg/l, [~~a more advanced level of~~
33 ~~nitrogen reduction as set forth in Subsection B of 20.7.3.603 NMAC~~]more stringent requirements pursuant to
34 Subsection L of 20.7.3.201 NMAC may be required.
35 [20.7.3.605 NMAC - N, 9/1/05; A, 4/1/07]

36
37 **20.7.3.606 through 20.7.3.700 [RESERVED]**
38

39 **20.7.3.701 DESIGN; CONVENTIONAL DISPOSAL FIELD; DESIGN AND CONSTRUCTION:**

- 40 A. Disposal trenches shall conform to the following:
41 (1) the trench width shall be no less than one foot or no more than 3 feet;
42 (2) a minimum of 6 inches of aggregate shall be placed below the invert of the distribution pipe; and
43 (3) up to a maximum of 3 feet of aggregate may be placed below the distribution pipe.
44 B. Absorption beds shall conform to the following:
45 (1) a minimum of 6 inches of aggregate shall be placed below the invert of the distribution pipes; and
46 (2) up to an additional one foot of aggregate may be placed below the distribution pipes.
47 C. For conventional [~~systems~~]disposal trenches and absorption beds, the distribution lines shall have
48 an inside diameter of no less than four (4) inches. Perforated pipe shall have two rows of holes and a minimum
49 perforated area of one and one-half (1 ½) square inches per linear foot. Perforations shall be located not less than 30
50 degrees or more than 60 degrees from the vertical on either side of the center line of the bottom of the pipe. All
51 plastic pipe and fittings shall conform to the current and appropriate ASTM standards. End caps shall be installed
52 on all distribution lines.
53 [B]D. Before placing aggregate or drain lines in a prepared excavation, all smeared or compacted
54 surfaces shall be removed from trenches by raking to a depth of one (1) inch and the loose material removed.
55 Aggregate shall be placed in the trench to the depth and grade required. Drain lines shall be placed on the aggregate
56 in an approved manner. The drain lines shall then be covered with aggregate to a minimum depth of two (2) inches

and then covered with untreated building paper, straw or similar porous material to prevent closure of voids with earth backfill. When geotextile fabric is utilized, no aggregate cover of the drainlines is required. No earth backfill shall be placed over the aggregate cover until authorized or approved by the department.

[C]E. The department shall allow drainfields for proprietary systems to be sized in accordance with recommendations by the wastewater technical advisory committee that have been approved by the secretary. The wastewater technical advisory committee shall make its recommendations upon standardized, objective evaluations in accordance with Section 9-7A-15 NMSA 1978. Drainfields for proprietary systems shall not be reduced in size by more than 30% in comparison to a conventional system.

[D]E. Capped inspection ports shall be constructed, at a minimum, of 4 inch diameter, SDR 35 or better pipe installed at the end of each trench, provide inspection access to the bottom of the trench and terminate at finished ground level. Inspection ports may be installed below grade if located in a protective enclosure and locatable with GPS coordinates or a metal detector.

[E]G. If seepage pits are used in combination with disposal fields, the aggregate in the trenches shall terminate at least 10 feet from the pit excavation and the line extending from such points to the seepage pit shall be constructed of approved pipe with watertight joints.

[F]H. Where two (2) or more drain lines are installed, an approved distribution box of sufficient size to receive lateral lines shall be installed at the head of each disposal field. The inverts of all outlets shall be level and the invert of the inlet shall be at least one (1) inch above the outlets. Distribution boxes shall be designed to [insure]ensure equal flow and shall be installed on a level base in natural undisturbed or compacted soil or on a concrete footing. Access to the distribution box shall be provided at the ground surface. However, the installer, after approval by the department, may install in lieu of a distribution box a tee fitting and a distribution header to multiple trenches provided that the tee and header pipe are level.

(1) Concrete distribution boxes shall be coated on the inside with bituminous coating or other approved method acceptable to the department.

(2) All laterals from a distribution box to the disposal field shall be approved pipe with watertight joints. Multiple disposal field laterals, wherever practicable, shall be of uniform length.

(3) Connections between a septic tank and distribution box or drainfield shall be laid with approved pipe with watertight joints on natural ground or compacted fill or appropriate bedding material. Such approved pipe shall be SDR 35 or better.

[G]I. When more than five-hundred (500) lineal feet of [leach]distribution line is required, a low-pressure dosed system shall be used.

[H]J. Disposal fields shall be constructed as follows:

	MINIMUM	MAXIMUM
Number of drain lines	1 per field	
Length of each line	--	[155]160 ft.
Bottom width of trench	12 in.	36 in.
Depth of earth cover of lines	9 in.	--
[Depth of Trench		6 ft.]
Grade of lines	level	3 inch/100 ft.
Aggregate under drain lines	6 in.	[--]3 ft.
Aggregate over drain lines with:		
geotextile fabric	0 in.	--
other material	2 in.	--

[I]K. Minimum spacing between trenches or [leaching]absorption beds shall be four (4) feet plus (2) feet for each additional foot of depth in excess of one (1) foot below the bottom of the drain line. Distribution drain lines in [leaching]absorption beds shall not be more than six (6) feet apart on centers and no part of the perimeter of the [leaching]absorption bed shall be more than three (3) feet from a distribution drain line.

[J]L. When necessary to prevent line slope in excess of 3 inches per 100 feet, absorption trenches or beds shall be stepped. The lines between each horizontal section shall be made with watertight joints and shall be designed so each horizontal trench or bed shall be utilized to the maximum capacity before the effluent shall pass to the next lower trench or bed. The lines between each horizontal absorption section shall be made with approved watertight joints and installed on natural or unfilled ground.

M. Sites with type Ia or type IV soils may use soil replacement. Sites with failed disposal systems may also use soil replacement if no suitable replacement area is available. In addition to other design, setback and clearance requirements of 20.7.3 NMAC, the following conditions are required:

- (1) The replacement soil must be type Ib as described in Table 703.1.
- (2) Replacement soil is placed to a depth of at least 48 inches below the bottom of each trench.
- (3) Replacement soil is placed to a width of at least 24 inches on both sides and the ends of each trench.

- (4) The application rate used for design of the trench shall be 2.0 square feet per gallon per day.

N. Disposal systems, including both conventional and alternative disposal, shall not be paved over or covered by concrete or any material that can reduce or inhibit any possible evaporation of effluent. Disposal systems shall not be subjected to vehicular traffic of any kind.

[20.7.3.701 NMAC - Rp, 20.7.3.405 NMAC, 9/1/05; A, 4/1/07]

[For specifications for drainfield pipe[s], see the most recent versions of the following ASTM standards:

ASTM D3034-04a Standard Specification for Type PSM Poly (Vinyl Chloride)(PVC) Sewer Pipe and Fittings, ASTM D2729, Standard Specification for Poly (vinyl Chloride)(PVC) Pipe and Fittings, ASTM F405-97, Standard Specification for Corrugated Polyethylene (PE) Tubing and Fittings, [or] and ASTM F810-01 Standard Specification for Smoothwall Polyethylene (PE) Pipe for Use in Drainage and Waste Disposal Absorption Fields]

20.7.3.702 DESIGN; SEEPAGE PIT; DESIGN AND CONSTRUCTION: Seepage pits should only be installed on sites where conventional disposal systems cannot be installed due to site restrictions.

A. The minimum capacity of seepage pits shall conform to the requirements of 20.7.3.703 NMAC.

B. Multiple seepage pit installations shall be served through an approved distribution box or be connected in series by means of a watertight connection laid on undisturbed or compacted soil. The outlet from each seepage pit shall have an approved vented leg fitting extending at least twelve (12) inches below the inlet fitting.

C. Each seepage pit shall have an excavated horizontal dimension of not less than four (4) feet and the maximum horizontal dimension shall not exceed the vertical dimension. Each such pit shall be lined with approved type whole, new, hard-burned clay brick, concrete brick, concrete circular type cesspool blocks or other approved materials.

D. The lining in each seepage pit shall be circular and laid on a firm foundation. Lining materials shall be placed tight together and laid with joints staggered. Except in the case of approved [type] pre-cast concrete circular sections, no brick or block shall be greater in height than its width and shall be laid flat to form at least a four (4) inch wall. Brick or block greater than twelve (12) inches in length shall have chamfered matching ends and be scored to provide for seepage. Excavation voids behind the brick, block or concrete liner shall have a minimum of six (6) inches of clean three fourths (3/4) inch gravel or rock.

E. All brick or block used in seepage pit construction shall have a minimum compressive strength of twenty-five hundred (2500) pounds per square inch.

F. Each seepage pit shall have a minimum sidewall (not including the arch) of ten (10) feet below the inlet pipe.

G. The arch, cover or dome of any seepage pit shall be constructed in one of the following three ways.

- (1) Approved type hard-burned clay brick, solid concrete brick or block laid in cement mortar.

(2) Approved brick or block laid dry. In both of the above methods, an approved cement mortar covering of at least two (2) inches in thickness shall be applied, said covering to extend at least six (6) inches beyond the sidewalls of the pit.

(3) Approved type one or two piece reinforced concrete slab of ~~[three thousand (3000)]~~ 3500 pounds per square inch minimum compressive strength, not less than five (5) inches thick and designed to support an earth load of not less than four hundred (400) pounds per square foot, as certified by a registered professional engineer.

H. Each such arch, dome or cover shall be provided with a nine (9) inch minimum inspection hole with plug or cover and shall be coated on the underside with an approved bituminous or other nonpermeable protective compound.

I. The top of the arch, dome or cover must be a minimum of twelve (12) inches but not more than four (4) feet below the surface of the ground. Risers must be provided to extend the arch, dome or cover to within twelve (12) inches of the surface.

J. An approved vented inlet fitting shall be provided in every seepage pit so arranged as to prevent the inflow from damaging the sidewall. When using a one or two piece concrete slab cover ~~[inlet]~~, the inlet fitting

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[may]must be an approved one fourth (1/4) bend fitting discharging through an opening in the top of the slab cover. On multiple seepage pit installations, the outlet fittings shall meet the requirements of Subsection B of 20.7.3.702 NMAC.

K. A 6 inch layer of bentonite clay shall be installed at the bottom of the seepage pit to restrict effluent flow through the bottom area. Alternative material to the bentonite clay may be approved by the department after review.

[20.7.3.702 NMAC - Rp, 20.7.3.406 NMAC, 9/1/05; A, 4/1/07]

20.7.3.703 DESIGN; AREA OF DISPOSAL FIELD AND SEEPAGE PITS:

A. The minimum required absorption area in a disposal field in square feet, and in seepage pits in square feet of side wall, shall be predicated on the liquid waste design flow rate and shall be determined by utilizing the following Table 703.1 based on the soil classification found in the proposed location of the disposal field.

B. Two test holes, located at opposite ends of the proposed disposal area, may be required for obtaining the soil profile and as provided in Subsection A of 20.7.3.203 NMAC.

C. A detailed soil profile, in accordance with USDA soil classification methodology, shall be submitted with the liquid waste application for each hole, indicating soil horizons, horizon thickness as a function of depth, and soil texture.

D. USDA soil surveys may be used where available to help assess typical soils in the area of the proposed installation.

E. The required absorption area shall be sized on the most restrictive soil horizon located below and within 4 feet of the bottom the absorption area.

F. Conventional treatment systems shall not be constructed in type Ia soils where the depth to groundwater is less than 30 feet [or gravel]. For these soils, refer to 20.7.3.605 NMAC.

G. Effluent distribution to type IV soils shall be accomplished with an appropriate disposal method as approved by the department such as timed low pressure dosed distribution or alternating drianfields.

H. The required absorption area shall be calculated by the following formula: ABSORPTION AREA = Q X AR, where: Q = the design flow rate in gallons per day; AR = application rate (from Table 703.1)

Table 703.1: Application Rates by Soil Types for Conventional Treatment Systems

Soil Type	Soil Texture	Application Rate (AR) (sq. ft./gal/day)
Ia	Coarse Sand <u>or up to 30% gravel</u>	1.25 (See Subsection F of 20.7.3.703 NMAC)
Ib	Medium Sand, Loamy Sand	2.00
II	Sandy Loam, Fine Sand , Loam	2.00
III	Silt, Silt Loam, Clay Loam, Silty Clay Loam, Sandy Clay Loam	2.00
IV	Sandy Clay, Silty Clay, Clay	5.00 (See Subsection G of 20.7.3.703 NMAC)

I. The gravel content of in-place natural soil shall not exceed 30%. The department may identify and map areas of the state where groundwater is not at risk from microbial contamination from on-site liquid waste

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disposal systems that discharge into gravel, and where gravel contents greater than 30% may be allowed. The following hydrogeologic conditions may be considered when determining if groundwater is no at risk:

- (1) groundwater does not exist;
- (2) uppermost groundwater contains a total dissolved solids concentration greater than 10,000 milligrams per liter;
- (3) uppermost groundwater occurs under confined conditions; and
- (4) uppermost groundwater occurs at a depth of 30 feet or greater with at least 4 feet of suitable soil in the vadose zone.

J. For disposal trenches; [shall conform to the following.]

- [(1)] The trench width shall be no less than one foot or no more than three feet.
- ~~[(2)] A minimum of six inches of aggregate shall be placed below the invert of the distribution pipe to provide surge storage. This area of trench sidewall shall not be used in calculating the absorption area.~~
- ~~[(3)] Up to an additional three feet of aggregate may be placed below the distribution pipe.]~~
- [(4)] [F]the total absorption area shall be calculated utilizing the total trench bottom and sidewall area below the distribution pipe; ~~excluding the six inches of trench sidewall required in Paragraph (2) of this subsection.~~

- [(5)] [F]the total absorption area shall not exceed seven square feet per linear foot of trench; and
- [(6)] [A]a minimum of 300 square feet of absorption area shall be provided for each system exclusive of any hard pan, caliche, rock, clay or other impervious formations.

K. [Leaching] [(a)] Absorption [y] beds [are allowed] may be used in lieu of trenches. The absorption area of the bed shall be at least fifty (50) percent greater than the minimum required absorption area for trenches with a minimum of [two hundred and twenty five (225)] 450 square feet of [bottom] absorption area. [In addition, leaching beds shall conform to the following.]

- ~~[(1)] A minimum of twelve inches of aggregate shall be placed below the invert of the distribution pipes.~~
- ~~[(2)] Up to an additional one foot of aggregate may be placed below the distribution pipes.~~
- ~~[(3)] The total absorption area shall be calculated utilizing the total bed bottom and sidewall area.~~

L. The minimum effective absorption area in any seepage pit shall be calculated as the excavated side wall area below the inlet pipe exclusive of any hardpan, caliche, rock, clay or other impervious formations and may be provided in one or more seepage pits.

M. For secondary and tertiary treated effluent, the minimum calculated absorption area required for conventional treatment may be reduced 30% [and the maximum trench depth may be no greater than 10 feet]. In no case shall the maximum reduction for the drainfield absorption area exceed 30%.
[20.7.3.703 NMAC - Rp, 20.7.3.403 NMAC, 9/1/05; A, 4/1/07]

20.7.3.704 through 20.7.3.800 [RESERVED]

~~[20.7.3.801 DESIGN; ALTERNATIVE DISPOSAL: Alternative disposal systems include, but are not limited to, privies, cluster systems, composting/incinerating toilets, evapotranspiration systems, mounds, subsurface irrigation, holding tanks, graywater systems and others as approved by the department.]~~
[20.7.3.801 NMAC - N, 9/1/05; A, 4/1/07]

20.7.3.[802]801 PRIVIES AND VAULTS:

A. A privy [or outhouse] may be used to dispose of non-liquid-carried human excreta directly to the soil. A vault may be used to dispose of non-liquid-carried human excreta for subsequent pumping and disposal in accordance with Section 20.7.3.306 NMAC. In addition to all setback and clearance requirements in 20.7.3 NMAC, the following conditions are required.

- (1) The privy or [outhouse] vault is constructed to prevent access by flies or vermin.
- (2) The privy or [outhouse] vault is located to prevent flooding.
- (3) There is are sufficient replacement locations area for two (2) additional privy pits. Vaults do not require replacement areas.
- (4) Privy [or outhouse] pits shall be filled with clean earth when excreta accumulate to within one foot of the ground surface.
- [(5)] ~~No privy or outhouse shall be located on a lot less than 0.75 acre.]~~

B. No person shall install or have installed a privy or [outhouse] vault unless that person obtains a permit issued by the department prior to construction of such installation. At the time of application, the total

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number of privies or ~~[outhouses]~~vaults and their replacement locations, if required, shall be indicated. When a privy ~~[or outhouse]~~ pit is filled, the privy or outhouse may be moved to a previously identified replacement location on the same lot without modifying or amending the permit.
[20.7.3.802 NMAC - N, 9/1/05]

20.7.3.~~[803]~~802 CLUSTER SYSTEMS:

A. Use of a cluster system may be considered when lot sizes, location or site conditions make conventional disposal unacceptable.

B. Cluster systems shall be designed and constructed in accordance with the requirements of this regulation. In addition, cluster systems shall be maintained in accordance with 20.7.3.902 NMAC.

C. Each user and successors and assignees in interest connected to the system shall be a permittee and shall be indicated on the permit.

D. After the effective date of the regulation, each permittee and successors and assignees in interest on a cluster system shall be a party to a legally binding, written agreement that provides for the service and maintenance for the life of the system. The agreement shall be recorded in the county in which the property is located. A copy of the agreement shall be provided to the department.

E. The parties to the written agreement shall obtain all necessary rights-of-way, easements or ownership of properties necessary for the operation of the system. All parties that use the cluster system shall be a party to the agreement.

F. The combined area of the lots served by the cluster system plus the area of the parcel where the system is located, if separated from the lots served, shall be used to determine the allowable lot size.

[20.7.3.803 NMAC - N, 9/1/05; A, 4/1/07]

20.7.3.~~[804]~~803 COMPOSTING AND INCINERATING TOILETS:

A. The installation of composting and incinerating toilets ~~[certified as meeting ANSI/NSF International Standard 41 shall be permitted]~~ shall be in accordance with the New Mexico plumbing code and the local plumbing authority.

B. The installation of a composting/incinerating toilet shall not reduce the design flow for the property.

~~[C. — Composting/incinerating toilets shall not be used on a lot less than 0.75 acre.]~~

[20.7.3.804 NMAC - N, 9/1/05]

20.7.3.~~[805]~~804 EFFLUENT IRRIGATION/REUSE SYSTEMS:

A. Effluent used for irrigation shall meet secondary treatment standards.

B. The effluent may only be utilized subsurface.

C. Application of the effluent resulting in standing or ponding of the effluent, whether liquid or frozen, shall be prohibited. The application of effluent shall not result in the effluent leaving the application area.

D. Effluent irrigation systems shall have no cross connections, direct or indirect, with potable water systems.

E. All effluent irrigation systems shall be pressure dosed to assure an even distribution and loading of effluent throughout the application area.

F. All parts of the reuse system shall be protected from freezing.

G. Effluent shall be contained on the permitted property.

H. The effluent shall only be applied to a suitable landscaped area or to fruit trees or nut trees.

I. Secondary treated and disinfected effluent may be used for toilet flushing or fire suppression with department approval.

J. Setback requirements for effluent irrigation systems shall meet the requirements of 20.7.3.302 NMAC except for the following:

- (1) property lines, 2 feet for disposal area; and
- (2) building or structure, 2 feet for disposal area.

K. Approved proprietary effluent drip irrigation systems shall be designed and installed according to manufacturers' specification.

L. A permitted and approved disposal system shall be provided for times when effluent irrigation is not utilized required.

[20.7.3.805 NMAC - N, 9/1/05; A, 4/1/07]

20.7.3.[806]805 EVAPOTRANSPIRATION SYSTEMS:

A. Evapotranspiration systems shall consist of a treatment unit and an evapotranspiration bed (ET bed) for disposal. ~~[Effluent discharged to an ET bed shall not exceed 200 mg/l of BOD.]~~ Evapotranspiration systems shall meet the requirements of 20.7.3.302 NMAC. Unlined ET beds are a discharging system and shall meet the clearance, set back and lot size requirements for conventional absorption systems. Lined ET beds are non-discharging systems and shall be underlain by a liner as specified in Paragraph (3) of Subsection L of 20.7.3.7 NMAC ~~[and shall provide for a leak detection method].~~

B. The minimum bottom area of ET beds shall be determined from the following formula:

$A = 391 \times Q \div E_L$, where: A = the bottom area of the bed in square feet; Q = the design flow in gallons per day; and E_L = the average annual lake evaporation for the site in inches per year.

C. The average annual lake evaporation shall be determined from the map "Gross Annual Lake Evaporation, New Mexico", USDA, April 1972, or successor version or a mutually acceptable evaporation rate.

D. The minimum bed depth shall be twenty four (24) inches as measured from the bottom of the ET bed to the overflow level. The surface crowning, which increases runoff from the ET bed, is above the overflow level of the ET bed. Maximum ET bed depth shall be thirty (30) inches. The bottom of the ET bed shall be level.

E. The ET bed location shall be in an area where exposure to the sun and wind will be maximized.

F. The distribution piping within the ET bed shall be embedded in gravel and covered meeting the specifications in 20.7.3.701 NMAC. Use of approved proprietary drainfield products may be used in lieu of pipe and gravel.

G. The capillary sand fill shall contain eighty five (85%) or more sand; the percentage of silt plus one and one-half times the percentage of clay shall not exceed fifteen percent (15%). Fine to medium sand is preferred. A grain size analysis shall be submitted to the department prior to the inspection of the ET bed.

H. A loamy sand shall be used for the surface crown. Where a loamy sand is not available, capillary sand may be used.

I. The crown surface shall be planted with vegetation suited to the climate and soil of the site and to the wastewater quality and quantity.

J. For a gravity feed system the overflow height of the ET bed shall be lower than the invert of the septic tank outlet.

K. All ET beds shall be equipped with an inspection port that is suitable to use to pump the system, if needed.
[20.7.3.806 NMAC - N, 9/1/05]

20.7.3.[807]806 MOUND AND ELEVATED SYSTEMS:

A. Mound systems shall meet the requirements of 20.7.3.302 NMAC.

B. Mounds are generally constructed entirely above the surrounding ground surface, however, the mound may be partially buried.

C. The design of the mound system shall be in accordance with the most current design standards of the Wisconsin mound system as specified in the reference materials in 20.7.3.8.B(8) NMAC, or other system designs as approved by the department.

D. Pressure distribution to the mound shall be required.

E. An elevated system shall meet the requirements of 20.7.3.302 NMAC.

F. Elevated systems may be constructed entirely above the surrounding grade or partially buried, as site conditions require.

G. An elevated system must be installed in accordance with proven design criteria and approved by the department.

H. A grain size analysis shall be submitted to the department prior to the inspection of the mound system.

[20.7.3.807 NMAC - N, 9/1/05; A, 4/1/07]

20.7.3.[808]807 LOW PRESSURE ~~[DOSED]~~ DISPOSAL SYSTEMS:

A. Low pressure dosed (LPD) disposal systems ~~[may be]~~ are used to achieve uniform distribution of wastewater ~~[over the entire infiltrative surface]~~ throughout the entire disposal system. Effluent ~~[from this type of system]~~ is pumped under low pressure through solid pipe into perforated lateral lines installed within a disposal system.

[B-](1) Low pressure dosed disposal systems may be used with any on site liquid waste system including conventional treatment systems, gray water systems and advanced treatment systems.

[C-](2) Low pressure dosed disposal systems may be used with any disposal system including trenches, beds, mounds, gravelless systems[;] and evapotranspiration systems [and drip irrigation].

[D-](3) Lift stations are not classified as low pressure dosed disposal systems.

[E-](4) Low pressure dosed disposal systems may use a timer to equalize the flow over a 24-hour period. LPD disposal systems may also be designed to rotate between separate disposal areas by using rotator valves.

~~[F-] Low pressure dosed disposal systems may use dosing siphons or pumps.]~~

[G-](5) All pumps shall be rated by the manufacturer for pumping sewage or effluent.

[H-](6) A single pump may be used for design flows equal to or less than 1,000 gpd. Dual alternating pumps are required for design flows over 1,000 gpd.

[I-](7) Design of the system shall include:

([1]a) design flow;

([2]b) except for mound systems, soil absorption area sized according to the effluent loading rates found in 20.7.3.703 NMAC;

~~[(3) spacing between lines with a minimum of 2 feet of separation;]~~

([4]c) total length of header and lateral pipes;

([5]d) diameter of perforated lateral lines used;

([6]e) size and spacing of holes or emitters; and

([7]f) pump performance sizing with allowances for head and friction losses at rated flows in gallons per minute.

[J-] (8) A ball valve shall be located vertically at the end of each lateral line for inspection and flushing except for proprietary drip irrigation systems.

~~[K-] Approved proprietary drip irrigation systems shall be designed and installed according to manufacturer's specifications.~~

~~L. Lateral lines shall be placed parallel to the natural contours of the site.~~

~~M. The distribution holes in the lateral lines shall be shielded or protected in some manner to prevent the infiltration of soil into the pipe.]~~

B. A low pressure pipe (LPP) disposal system is a pressurized distribution system place in shallow, narrow trenches. The effluent discharged to a LPP system must meet, at a minimum, primary treatment standards.

(1) The low pressure pipe system shall be sized as follows.

(a) The required absorption area shall be sized in accordance with Subsection H of 20.7.3.703 NMAC.

(b) A sizing credit of 5 square feet per linear foot of lateral pipe shall be applied to the total required absorption area.

(c) Each individual lateral shall not exceed 750 feet in length from the feed point unless the design is such that the discharge rate between any two points in the system does not exceed ten percent.

(2) Design for LPP systems shall conform to the following.

(a) Trenches shall be 12 inches to 18 inches wide and 12 inches deep.

(b) When aggregate, either natural or proprietary, is used, the lateral pipe shall be embedded at or above the center of the column of aggregate.

(c) The aggregate shall be covered with geotextile material to prevent soil intrusion.

(d) If a proprietary drainfield product other than aggregate is used, [such as the Orenco half pipe system or narrow chambers,] the distribution pipe shall be placed so as to prevent soil intrusion into the pipe.

(e) A minimum of 4 inches and a maximum of 18 inches of soil cover over the trench is required.

(f) Lateral lines shall be placed parallel to the natural contours of the site.

(g) Provisions shall be made for the prevention of siphoning back to the pump tank on upgrade systems and the prevention of draining of tank on downgrade or flat systems.

(h) All requirements for conventional disposal systems shall be met, including but not limited to, setback and clearance requirements, lot size, design flow calculations, septic tank sizing, prohibitions, wastewater characteristics and advanced treatment requirements.

(i) Runoff shall be diverted away from the system to avoid oversaturation, where possible.

(j) A vegetative cover shall be maintained over the disposal area.

(3) Materials and equipment for LPP systems shall conform to the following.

(a) All treatment units and pump tanks shall meet the structural requirements of 20.7.3.501 NMAC.

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(b) The pump tank shall be a single compartment with a 500 gallon minimum useful volume, and allowance to be made for tank volume between the pump intake and tank floor. For septic tank effluent, a separate pump tank, in addition to the septic tank, is required.

(c) Effluent type pumps are required on all systems.

(d) A system design shall demonstrate that the system comes to the design pressure during every pumping cycle.

(e) An alternating valve or solenoid valve system is required to feed separate laterals with elevation differences resulting in 23 feet (10 psi) or greater head differentials. Manual or automatic flushing valves with turn-ups are required on distal ends of all laterals.

(f) In areas of freezing conditions, provisions for the draining of the headers must be made, such as vacuum breakers or vent holes at the system high points.

(g) Pipe shall be rated at 160 psi minimum, ASTM compression drainpipe, schedule 40 or better.

(h) The manifold pipe shall be sized appropriately for system size and configuration. The lateral pipe shall be 1 inch to 2 inch in diameter.

(i) The orifice size shall be 5/32 inch to 1/4 inch for septic effluent and 1/8 inch to 1/4 inch for secondary and tertiary treated effluent.

(j) The lateral pipe shall be installed with orifices facing upward.

(4) A maintenance contract shall be required on all LPP systems. Maintenance is to include pump inspection and cleaning, float operation (if applicable), lateral flushing annually at a minimum and septic tank and pump tank pumping as needed.

C. Designs that do not conform to the design parameters specified in Subsection B above must be accompanied by documentation justifying the design submitted, including propriety software input and output reports, and will be considered on a case-by-case basis.

[20.7.3.808 NMAC - N, 9/1/05; A, 4/1/07]

20.7.3.[809]808 HOLDING TANK REQUIREMENTS:

A. The installation of holding tanks for the disposal of liquid wastes shall be authorized on a temporary basis only and only for residential units where conventional or alternative liquid waste treatment systems cannot be installed, except where noted in paragraph E below.

B. The installation of holding tanks shall not be authorized for commercial units except where noted in Subsection E below.

C. Holding tanks shall not be installed to serve any design flow greater than 375 gallons per day, except for the direct collection of RV waste or to replace an existing holding tank. Total design flow on any property served by a holding tank shall not exceed 375 gallons per day except for the direct collection of RV waste.

D. The installation of holding tanks shall be authorized for no more than one (1) year from the date of installation for units occupied more than one hundred twenty (120) days per calendar year.

E. The installation of holding tanks shall be authorized for permanent use only for the following:

(1) residential units, with a design flow rate of 375 gpd or less, occupied one hundred twenty (120) days or less per calendar year;

(2) residential units utilizing the holding tank only for the discharge of toilet waste in conjunction with a conventional treatment system for the remainder of the wastewater;

(3) non-residential, non-commercial units, such as guard shacks, toll booths, etc., with a design flow rate of 100 gpd or less; and

(4) the direct collection of RV waste and portable toilet waste for disposal in accordance with 20.7.3.306 NMAC.

F. Holding tanks shall be constructed of the same materials, by the same procedures and to the same standards as described in 20.7.3.501-502 NMAC except that they shall have no discharge outlet.

G. All holding tank installations shall be tested on site for water tightness.

H. The minimum size of a holding tank shall be 1000 gallons or four (4) times the design flow, whichever is greater.

I. Holding tanks shall be located in an area readily accessible to a pump vehicle under all weather conditions and where accidental spillage during ~~[pumpage]~~ pumping will not create a nuisance or a hazard to public health.

J. Holding tanks shall be protected against flotation under high ground water conditions by weight of tank (ballasting), earth anchors or by surface or shallow installation. Holding tanks shall be protected from freezing.

K. Holding tanks shall be equipped with a visible and audible high water alarm system placed in a conspicuous location approved by the department. The alarm shall be set to activate at 80% of the tank capacity. It shall be a violation of these regulations to tamper with or disconnect the alarm system.

L. The owner of a holding tank shall have the tank pumped to prevent discharge from the tank and the liquid waste (septage) properly disposed of in compliance with all applicable laws and regulations. Owners of holding tanks shall maintain records demonstrating pumping and proper disposal of septage from the units to prevent discharge. Copies of pumping and disposal manifests shall be retained by the owner for at least seven years and shall be made available to the department for inspection on request. The records shall be:

- (1) kept on a form provided by the department if requested;
- (2) accompanied by such other documentation as the department may reasonably require;
- (3) signed by the lot owner or an authorized representative; and
- (4) submitted on a semi-annual basis, or a schedule otherwise determined by the department, to the department field office having jurisdiction, and
- (5) be included in any transfer inspection report or unpermitted system inspection report.

M. No person shall install, operate, modify or maintain a holding tank that allows discharge to the soil or to waters of the state.

N. The department may perform site inspections periodically to ensure that a holding tank does not discharge.

O. All [~~residential and commercial~~] units utilizing a holding tank shall connect to a public sewer upon availability and in accordance with the local authority that has jurisdiction. A public sewer shall be deemed available when the public sewer is located in any thoroughfare, right-of-way or easement abutting the lot on which the [~~residential or commercial unit~~] is located. The holding tank shall be properly abandoned in accordance with 20.7.3.307 NMAC within 30 days of connection to the public sewer.
[20.7.3.809 NMAC - Rp, 20.7.3.305 NMAC, 9/1/05]

20.7.3.809 GRAYWATER SYSTEMS: Graywater systems not meeting the requirements of 20.7.3.81009 NMAC shall meet the following requirements:

A. The installation of separate graywater systems shall be authorized for residential units and shall be located on the lot served. The capacity of the on-site liquid waste system, including required replacement area, shall not be decreased or otherwise affected by the existence or proposed installation of a graywater system servicing the lot.

B. All information required in 20.7.3.402 NMAC for the issuance of a permit shall be required.

C. Design flows for graywater systems shall be calculated by the following:

- (1) Twenty percent (20%) of the [~~total~~]liquid waste design flow for the segregation of laundry waste; and
- (2) Thirty-three percent (33%) of the [~~total~~]liquid waste design flow for the segregation of the bathroom (showers, tubs and wash basin) waste.

D. For graywater systems on lots where the residential unit is served by a sewerage system, the minimum lot size set forth in 20.7.3.301 NMAC shall not be required.

E. Clearance requirements for graywater systems shall meet the requirements of 20.7.3.303 NMAC.

F. Setback requirements for graywater systems shall meet the requirements of 20.7.3.302 NMAC except for the following:

- (1) property lines, two (2) feet for disposal area;
- (2) building or structure, two (2) feet for disposal area; and
- (3) building or structure, zero (0) feet for above ground tanks.

G. A treatment unit shall be required for all graywater systems. If a tank is utilized as the treatment unit:

- (1) the tank may be a single compartment;
- (2) the tank shall be sized to accommodate one day design flow; and
- (3) access to the tank shall be provided by a tamper resistant lid installed at grade.

Graywater should be utilized within twenty-four (24) hours of collection unless additional treatment is provided.

H. Tanks installed below ground shall meet the requirements of 20.7.3.501-502 NMAC except for the requirements stated in Paragraph G of this section. Tanks shall be protected against possible floatation.

I. Above ground tanks shall be constructed of solid durable materials, not subject to corrosion or decay and shall be approved by the department. Above ground tanks shall be set on a three inch (3") minimum concrete pad. Metal tanks shall not be authorized.

Yellow highlight indicates changes made after the conclusion of the public hearing.

- 1 J. All tanks shall have an overflow drain with a permanent connection to the building drain or
2 building sewer. The tank shall be protected against sewer line backflow by a backwater valve.
3 K. Each tank shall be vented as required by chapter 9 of the uniform New Mexico plumbing code.
4 L. Each tank shall have its rated liquid capacity permanently marked on the unit. In addition, a sign
5 "GRAYWATER SYSTEM, DANGER – UNSAFE WATER" shall be permanently marked on the tank.
6 M. The disposal system shall be constructed in accordance with 20.7.3.[805]804 NMAC.
7 N. The graywater system shall have no direct or indirect cross connections with potable water
8 systems.
9 O. Graywater use for purposes other than irrigation or toilet flushing is prohibited. Irrigation of
10 edible food crops except for fruit trees or nut trees is prohibited.
11 [20.7.3.811 NMAC - N, 9/1/05; A, 4/1/07]
12

13 **20.7.3.810 GRAYWATER DISCHARGES:** Graywater discharge of less than 250 gallons per day of
14 private residential graywater originating from a residence for the resident's household flower gardening, composting
15 or landscaping irrigation shall be allowed if:

- 16 A. a constructed graywater distribution system provides for overflow into the sewer system or on-site
17 wastewater treatment and disposal system;
18 B. a graywater storage tank is covered to restrict access and to eliminate habitat for mosquitos or
19 other vectors;
20 C. a graywater system is sited outside of a floodway;
21 D. graywater is vertically separated at least five feet above the ground water table;
22 E. graywater pressure piping is clearly identified as a nonpotable water conduit;
23 F. graywater is used on the site where it is generated and does not run off the property lines;
24 G. graywater is discharged in a manner that minimizes the potential for contact with people or
25 domestic pets;
26 H. ponding is prohibited, discharge of graywater is managed to minimize standing water on the
27 surface and to ensure that the hydraulic capacity of the soil is not exceeded;
28 I. graywater is not sprayed;
29 J. graywater is not discharged to a watercourse;
30 K. graywater use within municipalities or counties complies with all applicable municipal or county
31 ordinances enacted pursuant to Chapter 3, Article 53 NMSA 1978;
32 L. graywater is not stored longer than 24 hours before being discharged;
33 M. graywater use for purposes other than irrigation or composting is prohibited, unless a permit for
34 such use is issued by the department;
35 N. graywater is not used to irrigate food plants except for fruit and nut trees;
36 O. graywater is discharged to a mulched surface area or to an underground irrigation system;
37 P. graywater is not discharged closer than 100 feet to a watercourse or private domestic well, or
38 closer than 200 feet to a public water supply well;
39 Q. graywater does not create a public nuisance;
40 R. for residential units using an on-site liquid waste system for blackwater treatment and disposal, the
41 use of a graywater system does not change the design, capacity or absorption area requirements for the on-site liquid
42 waste system at the residential unit, and the on-site liquid waste system is designed and sized to handle the
43 combined blackwater and graywater flow if the graywater system fails or is not fully used; and
44 S. graywater does not contain hazardous chemicals derived from activities such as cleaning car parts,
45 washing greasy or oily rags or disposing of waste solutions from home photo labs or similar hobbyist or home
46 occupational activities.
47 [20.7.3.810 NMAC - Rp, 20.7.3.310 NMAC, 9/1/05]
48

49 **~~[20.7.3.812 — PUMP STATIONS AND EQUIPMENT:~~**

- 50 ~~— A. Pump stations or pump chambers shall be watertight and shall be constructed of concrete, plastic,~~
51 ~~fiberglass or other approved material. Tanks and chambers shall be designed and constructed so as to serve their~~
52 ~~intended purpose and appropriately coated to resist corrosion.~~
53 ~~— B. All valves, motors, pumps, aerators and other mechanical or electrical devices shall be located~~
54 ~~where they will be accessible for inspection and repair at all times and protected with a locking removable cover.~~
55 ~~— C. Pump stations or pump chambers shall be equipped with both audible and visual alarms, or remote~~
56 ~~and visual alarms, for high water and pump failure. All alarm and control circuits shall be on a separate circuit from~~

pumps and shall be contained in weather-proof control boxes or located inside a building or other weather proof structure. Alarms shall be placed in a conspicuous location approved by the department.]
[20.7.3.812 - Rp 20.7.3.402 NMAC, 9/1/05]

[20.7.3.813 — BUILDING SEWER:

A. The building sewer connects the building drain to the septic tank or liquid waste treatment unit. Horizontal building sewer piping shall be run in practical alignment and a uniform slope of not less than one-fourth (1/4) of an inch per foot or two percent (2%) toward the point of disposal provided that where it is impractical due to the structural features or arrangement of any building or structure to obtain a slope of one-fourth (1/4) of an inch or two percent (2%), any such pipe or piping four (4) inches in diameter or larger may have a slope of not less than one-eighth (1/8) of an inch per foot or one percent (1%), when first approved by the department.

B. Each horizontal sewer pipe shall be provided with a cleanout at its upper terminal and each run of pipe that is more than one hundred (100) feet in length shall be provided with a cleanout for each one hundred (100) feet or fraction thereof. Cleanouts shall be installed pursuant to the [uniform] New Mexico plumbing code [(UPC)].

C. Sewer piping shall be an approved material having a smooth uniform bore. Vitrified clay pipe or fittings shall not be used above ground or where pressurized by a pump or ejector. Vitrified clay pipe or fittings shall be a minimum of twelve (12) inches below ground.]

[20.7.3.813 - Rp, 20.7.3.402 NMAC, 9/1/05]

20.7.3.811 SPLIT FLOW SYSTEMS: Split flow systems may be installed for the purpose of reduction of total nitrogen discharges in lieu of installation of non-discharging or tertiary treatment systems

A. Based on the assumption that toilet waste contains 80 per cent of the total nitrogen in domestic liquid waste and that the quantity of liquid waste from toilets is are 25 per cent of the total domestic waste stream, the following formula shall be used to calculate the minimum lot size allowed for permitting of a split flow system: minimum lot size (in acres) = 0.0003 ~~X~~ x design flow.

B. The disposal system for non-toilet waste shall be based on the assumption that non-toilet waste comprises 75% of the design flow and therefore may be reduced to 75% of the minimum required absorption area in 20.7.3.703 NMAC.

C. The toilet waste holding tank shall have a minimum capacity of 1000 gallons and shall meet all requirements of holding tanks described in Section 20.7.3.[899]808 NMAC, except for Subsections A, B, C, D, E and H.

D. Effluent from the waste holding tank may be discharged to an ET bed constructed in accordance with 20.7.3.[806]805 NMAC and sized at 25% of design flow. An effluent filter is required on the waste holding tank.

[20.7.3.812 – N, xx/xx/xxxx]

20.7.3.812 SAND-LINED TRENCHES AND BOTTOMLESS SAND FILTERS:

A. Effluent applied to a sand-lined trench shall not exceed primary treatment standards.

B. The required absorption area shall be calculated based on a maximum loading rate of 1.0 gallons per day per square foot of sand surface. No sidewall credit is allowed.

C. The distribution system shall conform to the requirements of 20.7.3.[808]807 NMAC, Low Pressure Disposal Systems.

D. A minimum of 24 inches of sand, meeting the latest version of ASTM C-33 specifications, shall be installed beneath the distribution system.

E. Trench width shall be a minimum of 12 inches and a maximum of 36 inches.

F. The effluent dosing rate shall be at least 4 doses per day and not more than 24 doses per day.

G. A sand-lined trench may be used to reduce setbacks as follows:

(1) 1 foot to a limiting layer;

(2) 50 feet to waters of the state; or

(3) 50 feet to an irrigation well located on the subject property.

H. A bottomless sand filter is a special case sand-lined trench consisting of a bottomless containment structure located partially above or at grade of the existing ground level.

(1) The containment structure must be certified by a professional engineer.

(2) A bottomless sand filter must be located parallel to the contours on a sloping site and be as long and narrow as possible to limit the linear loading rate on the disposal area.

I. A maintenance contract shall be required. Maintenance is to include pump inspection and cleaning, float operation (if applicable), lateral flushing annually at a minimum and septic tank and pump tank pumping as needed.
[20.7.3.813 – N, xx-xx-xxxx]

20.7.3.[814]813 through 20.7.3.900 [RESERVED]

20.7.3.901 MONITORING:

A. As a condition to any permit, the owner of an on-site liquid wastes system shall [permit]allow department personnel or maintenance service provider personnel right of entry to the property at reasonable times to allow for maintenance, system monitoring, effluent sampling or evaluating the general state of repair or function of the system.

[B. ~~On-site liquid waste systems that require secondary treatment levels be achieved shall be sampled and analyzed only for 5-day BOD quarterly for the first year, semi-annually for the second year, and yearly thereafter or as otherwise required by the department to meet the requirements of the permit. Chemical oxygen demand (COD) may be substituted for BOD5 with an acceptable calibration curve as approved by the department.~~

C. ~~On-site liquid waste systems that require tertiary treatment levels be achieved shall be sampled and analyzed only for total nitrogen quarterly for the first year, semi-annually for the second year, and yearly thereafter or as otherwise required by the department to meet the requirements of the permit.~~

D. ~~Advanced systems requiring disinfection shall be sampled and analyzed for fecal coliform quarterly for the first year, semi-annually for the second year, and yearly thereafter or as otherwise required by the department. In addition:~~

~~(1) when chlorine is used for disinfection, the total chlorine residual, at all times, shall be equal to or greater than 1.0 mg/l after thirty (30) minutes detention time at peak flows; and~~

~~(2) alternative disinfection methods, such as ultraviolet light, ozone or other methods, may be utilized after department approval.]~~

B. Advanced treatment liquid waste systems require maintenance and monitoring. These systems shall be maintained and monitored, at a minimum, semi-annually or more as per manufacturers' recommendations.

(1) Monitoring will include all the following parameters:

(a) dissolved oxygen (DO);

(b) temperature;

(c) pH;

(d) sludge depth; and

(e) other parameters recommended by the manufacturer.

(2) Parameters should be measured at locations within the treatment unit that will demonstrate the effectiveness of treatment.

(3) Monitoring shall be completed utilizing field instruments including a DO meter, thermometer, pH meter, sludge sampler or other approved instruments.

(4) Parameters and maintenance requirements shall be included in the permit application design statement and be consistent with the manufacturer's recommendations for proper operation.

(5) Field instruments shall be calibrated as per manufacturer's recommendation and a log maintained on the operation and calibration of each instrument. Logs shall be made available to the department upon request.

C. Effluent sampling shall be required for on-site liquid waste systems that do not conform to manufacturer guidelines for field parameters pursuant to 20.7.3.901.B NMAC, for systems where the manufacturer has not established guidelines for field parameters, or for systems that the department has determined are not operating properly. Sampling shall be conducted annually, or as otherwise required by the department.

(1) On-site liquid waste systems that require primary treatment levels be achieved may be sampled and analyzed or monitored as specified in the permit.

(2) On-site liquid waste systems that require secondary treatment levels be achieved may be sampled and analyzed only for 5-day BOD (BOD5) or monitored as specified in the permit. Chemical oxygen demand (COD) may be substituted for BOD5 with an acceptable calibration curve acceptable to as approved by the department.

(3) On-site liquid waste systems that require tertiary treatment levels be achieved may be sampled and analyzed only for total nitrogen or monitored as specified in the permit.

(4) On-site liquid waste systems requiring disinfection may be sampled and analyzed only for E. coli or monitored as specified in the permit. In addition:

(a) when chlorine is used for disinfection, the total chlorine residual, at all times, shall be equal to or greater than 1.0 mg/l after thirty (30) minutes detention time at peak flows; and

(b) alternative disinfection methods, such as ultraviolet light, ozone or other methods, may be used after department approval.

[E]D. All sampling, maintenance, monitoring and analysis shall be performed by certified personnel in accordance with the most current edition of *standard methods for the examination of water and wastewater* or other methods, including field instruments, approved by the department and recommended by the manufacturer.

[F]E. Maintenance, monitoring and sampling shall occur between the hours of 7:00 am and 7:00 pm.

[G]F. Monitoring reports, sampling records and maintenance reports/logs shall be submitted to the local field office within thirty (30) days of the maintenance, monitoring and/or required sampling event.

[H]G. All [test] monitoring or sampling results exceeding the permit limits shall be reported to the local field office within five (5) working days.

[I. Sampling frequency shall be quarterly for the first year, semi-annually for the second year, and yearly thereafter, unless otherwise specified in the permit.]

[J]H. If any two consecutive samples exceed the [single sample] permitted treatment limit, the system design and operation shall be evaluated by a professional engineer or a maintenance service provider for conformance with permitting conditions and shall be adjusted to bring the effluent quality into compliance. The system shall be resampled no later than 30 days from the evaluation and results submitted to the department within 5 working days of analysis.

[K]I. If the [6-sample rolling average] resample required in Paragraph H above exceeds the permitted treatment [standards specified in 20.7.3.602 and 603 NMAC] limit, the treatment system shall be subject to review and re-evaluation with regard to operation and maintenance. A department approved contingency plan, including more training for the maintenance service provider or replacement with a more experienced operator, may be implemented.

[L]J. The following shall be considered as violations of the monitoring requirements of the permit.

(1) Failure to collect, analyze and report maintenance, monitoring and/or sampling results.

(2) The submission, by the owner or maintenance entity of an advanced treatment system or agent or employee thereof, of misleading or inaccurate information to the department, through neglect.

(3) The submission of fraudulent data including the following:

(a) apparent measurement results for which no measurement or test results were actually made as determined by the absence of the supporting records that are usually made;

(b) measurements or test results obtained by deliberately and knowingly making measurements or collecting samples at places and times other than as specified in the permit or 20.7.3 NMAC; and

(c) test results obtained through use of unapproved and erroneous sampling, preservation, storage or analysis procedures.

[20.7.3.901 NMAC - N, 9/1/05]

20.7.3.902 OPERATION AND MAINTENANCE REQUIREMENTS AND EVALUATION AND INSPECTION REQUIREMENTS AT TIME OF TRANSFER:

A. The owner of an on-site liquid waste system, including systems existing prior to the effective date of this regulation, shall be responsible for properly operating and maintaining the system in accordance with the recommendations of the manufacturer or designer of the system.

B. The owner of an advanced treatment system installed after the effective date of this regulation shall enter into a department approved maintenance contract with a maintenance service provider that will assure maintenance of the system in accordance with the recommendations of the manufacturer or designer of the system. A maintenance contract shall be in effect at all times.

C. Household hazardous waste [and high strength waste] shall not be introduced into the system. Wastewater that exceeds domestic liquid waste may be treated by an appropriately designed advanced treatment system.

D. Any spillage that may occur during tank pumpout shall be cleaned up immediately and the spill area disinfected with a sodium or calcium hypochloride solution.

E. Prior to the transfer of a property with an [existing permitted] established on-site liquid waste system, the [current system owner] transferor of the property shall have the system [inspected] evaluated.

[Permitted] Liquid waste systems shall be evaluated by an inspector qualified in accordance with Subsection [C]B of 20.7.3.904 NMAC utilizing a department approved form. Unpermitted liquid waste systems shall be [inspected by

1 ~~the department and~~ registered pursuant to Subsection J ~~[or K]~~ of 20.7.3.401 NMAC or permitted pursuant to
2 Subsection K of 20.7.3.401 NMAC.

3 F. For permitted conventional liquid waste systems, a non-invasive evaluation shall be conducted,
4 with a copy provided to the buyer. The evaluation shall ~~that determines whether or not:~~

5 (1) the treatment unit is watertight, is functioning properly and the existing tank has a liquid capacity
6 within one tank size of the capacity required by Subsection Q of 20.7.3.201 NMAC;

7 (2) the disposal system appears to be functioning properly;

8 (3) the liquid waste system appears to meet setbacks and clearances;

9 (4) lot size requirements of the regulations in effect at the time of the initial installation, or in effect at
10 the time of the most recent permitted modification, are met; and

11 (5) the system does not constitute a public health or safety hazard.

12 G. For permitted advanced treatment systems, in addition to the requirements of Subsection F of
13 20.7.3.902 NMAC:

14 (1) the system shall be sampled in accordance with permit conditions for compliance with 20.7.3.602-
15 604 NMAC if a regularly scheduled sampling event has not occurred within 180 days of the [inspection]evaluation;
16 the sampling results shall be included with the system report; if a regularly scheduled sampling event has occurred
17 within 180 days of the [inspection]evaluation, the results of the sampling shall be included in the
18 [inspection]evaluation report; [and]

19 (2) an amendment of permit reflecting ownership change is required pursuant to Subsection E of
20 20.7.3.403 NMAC; and

21 (3) evaluators shall provide prior notice of the evaluation to the department and to the maintenance
22 service provider of an advanced treatment system.

23 [G]H. [Inspections]Evaluations shall be recorded on forms approved by the department. [Inspection]
24 Evaluation reports shall be kept on file by the inspector of the on-site liquid waste system. Inspectors shall submit to
25 the department copies of all [inspection]evaluation reports, whether completed or not, within 15 days of the
26 [inspection]evaluation. A permit or variance application shall be submitted within 15 days of the
27 [inspection]evaluation, by the party who is or will be the owner of the property on the 15th day following the
28 evaluation, to correct any deficiencies or permit violations identified by the [inspection]evaluation. In addition, all
29 [inspection]evaluation reports shall include the global positioning system (GPS) coordinates of the [tank]treatment
30 unit. Once an [inspection]evaluation is requested, all results, whether complete or not, shall be submitted to the
31 department.

32 I. If a final inspection with final approval for a new or modified system or a property transfer
33 evaluation for an existing system has been done within 180 days of the transfer of the property, the property transfer
34 evaluation need not be conducted.

35 [H]J. In the event of a failed system, that includes, but is not limited to disposal fields, the owner shall
36 remedy the failed system with department approval. In the event property with an existing permitted on-site liquid
37 waste system is transferred prior to the remediation of a failed system, the transferee becomes responsible under
38 these regulations for remedying the failed system.
39 [20.7.3.902 NMAC - N, 9/1/05; A, 4/1/07; A, 11/21/11]

41 **20.7.3.903 MAINTENANCE SERVICE PROVIDERS (MSP) FOR CONVENTIONAL AND** 42 **ADVANCED ON-SITE LIQUID WASTE SYSTEMS:**

43 A. Maintenance service providers (MSP) shall at a minimum:

44 ~~[(1) — obtain certification by the national association of waste transporters (NAWT) or equivalent];~~

45 ~~[(2)]1~~ inspect, operate and maintain the system in accordance with the manufacturer's specification
46 and permit requirements; and

47 ~~[(3)]2~~ submit pumping and inspection records [upon request to]as requested by the department.]

48 B. The MSP personnel shall [be];

49 (1) possess a valid and appropriate CID license when required for the specific activities performed;
50 and

51 (2) be certified by the manufacturer for the proprietary unit being maintained;

52 (3) hold operator certification for be certified as an small advanced wastewater systems advanced
53 operator, or higher, from the state of New Mexico;

54 (4) be certified at an acceptable level as a wastewater operator from another state; or

55 (5) be certified based on other credentials as approved by the department.

56 ~~[C. — The MSP personnel shall be trained in the proper operation and maintenance of the system.]~~

Yellow highlight indicates changes made after the conclusion of the public hearing.

[D]C. The MSP personnel shall have the ability to sample the unit in accordance with approved sampling methods under this part.

[E]D. The MSP shall have in place, and have reviewed by the department, a standardized quality assurance/quality control (QA/QC) plan.

[F]E. The MSP shall be able to respond to emergency situations within forty-eight (48) hours of being notified.

[G]F. A public MSP shall adopt an ordinance, bylaw or rule, as appropriate, approved by the department, detailing the terms and conditions of service.

[H]G. A private MSP shall use a contract for service that contains, at least, minimum standards approved by the department.

[I]H. The MSP shall ~~[meet minimum requirements, as promulgated by the department, for effective operation, such as:~~

~~(1) reasonable response time;~~

~~(2) appropriate equipment;~~

~~(3) parts inventory;~~

~~(4) quality assurance/quality control plan; and~~

~~(5) insurance.]~~have a quality assurance/quality control plan acceptable to the department and shall provide a copy to the department upon request.

[J]I. The MSP shall notify the department within 5 working days of any failed system.

J. The department may deny any permit application that include maintenance contracts with a MSP that has been shown through a compliance order issued in the past 2 years to fail to provide proper maintenance of a treatment system.

K. The MSP must properly maintain and sample all systems for which they have an active maintenance or sampling contract.

L. The MSP must notify the department of any change in homeowner for systems for which they have an active maintenance or sampling contract.

[20.7.3.903 NMAC - N, 9/1/05]

20.7.3.904 REQUIREMENTS FOR QUALIFICATION:

A. Qualified homeowner.

(1) A homeowner must become qualified to install an on-site liquid waste system by passing an exam administered by the department.

(2) Homeowner training materials and opportunities for exams, by appointment, shall be available at all department field offices.

(3) A qualified homeowner may apply for a permit to install or modify a conventional on-site liquid waste treatment and disposal system serving the qualified homeowner's personal residence in accordance with Subsection C of 20.7.3.401 NMAC.

(4) A qualified homeowner shall not install or modify an on-site liquid waste system serving a rental unit, or other property that is not the qualified homeowner's personal residence.

(5) A homeowner qualification shall be valid for one year from the date of issuance of qualification; the department may extend the qualification beyond one year for good cause shown.

(6) A qualified homeowner may install no more than one liquid waste system during a twelve month period.

(7) A qualified homeowner who self-installs a system shall not compensate any person to perform any phase of the system construction, unless that person holds a valid and appropriate classification of contractor's license issued by the New Mexico construction industries division.

B. Third party ~~inspectors~~ evaluators.

(1) Evaluations ~~Inspections~~ of liquid waste systems prior to property transfers are required by Subsection E of 20.7.3.902 NMAC. The department shall inspect unpermitted liquid waste systems installed after February 1, 2002. Third party inspectors shall ~~[inspect]~~ evaluate permitted liquid waste systems and unpermitted systems installed prior to February 1, 2002.

(2) Qualifications as third party inspectors shall be based on one of the following:

(a) a valid and appropriate classification of licensure by the construction industries division of the regulation and licensing department;

(b) ~~[certification as a registered professional engineer with a specialty sub-discipline of on-site wastewater engineering]~~ licensure as a professional engineer in the disciplines of civil, environmental or mechanical engineering;

(c) accreditation in on-site wastewater inspection by the national sanitation foundation (NSF);
(d) certification by the national environmental health association (NEHA) as an installer of on-site wastewater treatment systems;

(e) certification as a registered environmental health specialist (REHS) or a registered sanitarian (RS); or

[(e)f] demonstration of a similar accreditation or certification or a combination of training and experience as approved by the department.

(3) Inspection of advanced wastewater treatment systems shall be performed only by persons qualified pursuant to Subsection C of 20.7.3.904 NMAC.

C. Maintenance service provider of advanced treatment systems.

(1) Maintenance service providers shall comply with 20.7.3.903 NMAC.

(2) In order to obtain approval by the department and in addition to receiving a recommendation for approval by the wastewater technical advisory committee, manufacturers or their authorized trainers of advanced treatment systems shall provide a written training and certification program, for approval by the department, for installers and maintenance service providers of their systems. Installers and maintenance service providers of advance treatment systems shall receive the training approved by the department at least once per year. Department representatives may audit training classes provided by the manufacturers for the purpose of evaluating the training provided.

~~[(3) Maintenance service providers for orphaned advanced treatment systems shall be qualified by the department. Qualification as a maintenance service provider for orphaned systems will be based on the following:~~

~~_____ (a) certification as an advanced small systems, level III or level IV wastewater operator from the state of New Mexico;~~

~~_____ (b) certification at an acceptable level as a wastewater operator from another state; or~~

~~_____ (e) other credentials as approved by the department.]~~

D. Septage pumps.

(1) Septage pumps shall demonstrate familiarity with applicable regulations and demonstrate competence in locating and exposing septic tanks, measuring septic sludge and scum levels, the complete pumping of septic tank sludge, maintenance of pumping equipment in a sanitary condition, prevention of pathogen transmission and preparation of an appropriate safety plan for normal operations.

(2) Septage pumps shall maintain his or her equipment to ensure no sewage spills occur during transport or storage and that his or her employees or the public are not subjected to a hazard to public health ~~undue health hazards~~.

(3) Septage pumps shall have a written contingency plan for spill abatement, and shall have the equipment and supplies needed to abate spills onsite during each pumping operation.

(4) Septage pumps shall notify the department of the facilities they use for the septage disposal, and shall provide the department with copies of any permits or licenses issued by the owner of the disposal facility.

E. Installer specialist.

(1) Any person who possesses the following minimum qualifications may apply to the department for certification as an installer specialist:

(a) a valid and appropriate classification of contractor's license issued by the New Mexico construction industries division for the construction of on-site liquid waste systems;

(b) three years of professional experience installing on-site liquid waste systems in New Mexico, or the installation or repair of either 100 on-site liquid waste systems in New Mexico in compliance with liquid waste permits approved by the department or by Bernalillo County, or 50 on-site liquid waste systems in New Mexico in compliance with liquid waste permits approved by the department or by Bernalillo County, plus certification as an installer of on-site wastewater systems by a national industry or trade organization;

(c) a written statement, signed by the applicant, that explains the applicant's history of, and commitment to, professionalism and regulatory compliance with regard to the on-site wastewater industry;

(d) the names, addresses, phone numbers and liquid waste permit numbers for three clients who own liquid waste systems installed by the applicant in New Mexico, and who have agreed to serve as references for the quality of work performed by the applicant;

(e) sixteen (16) hours of training credits approved by the department completed during the previous twelve months;

(f) successful completion of a 20.7.3 NMAC training class and examination provided by the department during the previous twelve months;

(g) no compliance orders issued to the applicant within the past five years for violation of any provision of 20.7.3 NMAC, except for compliance orders that are presently under appeal or that have been overturned on appeal or withdrawn by the department; and

(h) no criminal convictions pursuant to NMSA 1978, Section 74-1-10 within the past five years for violation of any provision of 20.7.3 NMAC.

(2) Application for certification as an installer specialist shall be made in writing on a form provided by the department, and shall include documentation of qualification requirements in Subparagraph (a), (b), (c), (d) and (e) of Paragraph(1) of Subsection E of 20.7.3.904 NMAC.

(3) The department shall, within fifteen working days of receipt of a complete application, notify the applicant in writing of approval or disapproval of the application.

(4) Department disapproval of an application may be appealed pursuant to the adjudicatory procedures in 20.1.5 NMAC.

(5) Installer specialist certification shall be valid for no longer than two years, expiring on January 31 of each even year.

(6) Installer specialists shall be recertified upon submission to the department, no later than January 15 of each even year, of documentation that the installer specialist has received sixteen hours of approved training credits completed during the previous two calendar years.

(7) The department shall maintain on its internet website a list of training curricula that have been approved for qualification and recertification as installer specialist.

(8) The department shall accept registrations for a 20.7.3 NMAC training class and exam no less frequently than quarterly within each department district.

(9) The department shall maintain on its internet website a list of certified installer specialist, along with a description of the minimum qualification requirements for certification.

(10) Subsection E of 20.7.3.904 NMAC shall cease to be effective (3 years after the effective date, add date upon approval) unless the department has provided prior to that date a written report to the New Mexico environmental improvement board documenting successful implementation of the installer specialist certification, and recommending that Subsection E of 20.7.3.904 NMAC continue to be effective.

F. Suspensions, revocations and denials.

(1) The department may deny a qualification if it determines that an applicant does not meet all eligibility requirements set forth above.

(2) The department, at any time, may suspend or revoke a qualification for cause to include fraud, misrepresentation, failure to provide required documentation, failure to provide service in accordance with the qualification or failure to comply with 20.7.3 NMAC. Suspension or revocation shall be by issuance of an order by the department.

(3) Any person who desires to appeal a denial, suspension, revocation or disqualification may appeal to the secretary. An appeal is initiated by submitting a request for a hearing. The request for a hearing must be in writing and made no later than thirty (30) days after notice of the action is served. Upon such request, the secretary shall conduct a hearing pursuant to the adjudicatory procedures in 20.1.5 NMAC.
[20.7.3.904 NMAC - N, 9/1/05; A, 4/1/07; A, 11/21/11]

20.7.3.905 WASTEWATER TECHNICAL ADVISORY COMMITTEE: Technical product review and approval shall be in accordance with 9-7A-15 NMSA 1978.
[20.7.3.905 NMAC - Rp, 20.7.3.8 NMAC, 9/1/05]

20.7.3.906 ADMINISTRATIVE ENFORCEMENT:

A. Any violation of these regulations is a petty misdemeanor subject to criminal penalties as authorized by NMSA 74-1-10.

B. The department may appear and prosecute any misdemeanor proceeding if the appearance is by an employee authorized by the secretary to institute or cause to be instituted an action on behalf of the department.

C. The secretary, at his discretion, may elect to pursue criminal or civil penalties, or both, for any violations of these regulations.

D. Upon any violation of these regulations, the department may:

(1) issue a compliance order stating the nature of the violation requiring compliance immediately or within a specific time period and assess a civil penalty for any past or current violation or both; or

(2) commence a civil action in district court for appropriate relief, including a temporary or permanent injunction.

E. Any penalty assessed in the compliance order for residential on-site liquid waste systems shall not exceed one hundred dollars (\$100) for each violation.

F. Any penalty assessed in the compliance order for non-residential on-site liquid waste systems shall not exceed one thousand dollars (\$1000) for each violation.

G. If a violator fails to achieve compliance within the time specified in the compliance order, the secretary shall assess civil penalties of not more than one thousand dollars (\$1000) for each noncompliance with the order.

H. A compliance order issued pursuant to this section shall become final unless, no later than thirty (30) days after the compliance order is served, the party named in the order submits a written request to the secretary for a hearing.

I. All requests for hearings shall be in accordance with 20.7.3.406 NMAC.

J. Penalties collected pursuant to violations of 20.7.3 NMAC shall be deposited in the state treasury to be credited to the general fund.

K. Any noncompliance with any provision of 20.7.3 NMAC or any permit provision may be subject to penalties.

[20.7.3.906 NMAC - N, 9/1/05]

20.7.3.907 AUTHORITY TO DISCONNECT SOURCE OF WATER SUPPLY: After due process is provided, the department may disconnect the source of water supply to a commercial or residential unit that is served by any on-site liquid waste system that has become a failed system and that presents an imminent hazard to public health. This authority includes authority to disconnect power utilities if necessary to disconnect the source of water supply. The department shall give notice of its actions to the unit owner and the tenants affected or as otherwise provided by the law.

[20.7.3.907 NMAC - Rp, 20.7.3.8 NMAC, 9/1/05; A, 4/1/07]

20.7.3.908 through 20.7.3.1000 [RESERVED]

20.7.3.1001 CONSTRUCTION: 20.7.3 NMAC shall be liberally construed to carry out its purpose.

[20.7.3.1001 NMAC - Rp, 20.7.3.501 NMAC, 9/1/05]

20.7.3.1002 TEMPORARY PROVISIONS: All registration certificates, permits, orders, rulings and variances issued pursuant to the regulations in effect at the time such registration certificates, permits, orders, rulings, or variances were issued shall remain in full force and effect until repealed, replaced, superseded or amended pursuant to 20.7.3 NMAC.

[20.7.3.1002 NMAC - Rp, 20.7.3.502 NMAC, 9/1/05]

20.7.3.1003 SEVERABILITY: If any provision or application of 20.7.3 NMAC is held invalid, the reminder, or its application to other situations or persons, shall not be affected.

[20.7.3.1003 NMAC - Rp, 20.7.3.503 NMAC, 9/1/05]

20.7.3.1004 REFERENCES IN OTHER REGULATIONS: Any reference to the liquid waste treatment and disposal regulations in any other rule shall be construed as a reference to 20.7.3 NMAC.

[20.7.3.1004 NMAC - Rp, 20.7.3.504 NMAC, 9/1/05]

20.7.3.1005 SAVINGS CLAUSE: Repeal or supersession of prior versions of the liquid waste disposal regulations shall not affect any administrative or judicial action for the enforcement thereof.

[20.7.3.1005 NMAC - Rp, 20.7.3.505 NMAC, 9/1/05]

20.7.3.1006 COLLATERAL REQUIREMENTS: Compliance with 20.7.3 NMAC does not relieve any person from the responsibility of meeting more stringent city or county regulations or ordinances or other requirements of state or federal laws governing the treatment or disposal of liquid waste.

[20.7.3.1006 NMAC - Rp, 20.7.3.506 NMAC, 9/1/05]

Yellow highlight indicates changes made after the conclusion of the public hearing.

20.7.3.1007 LIMITATIONS OF DEFENSE: The existence of a valid permit for installation or modification of an on-site liquid waste system shall not constitute a defense to a violation of any section of 20.7.3 NMAC except the requirement for obtaining a permit (20.7.3.401-404 NMAC).
[20.7.3.1007 NMAC - Rp, 20.7.3.507 NMAC, 9/1/05]

20.7.3.1008 to 20.7.3.1100 [RESERVED]

HISTORY OF 20.7.3 NMAC:

Pre-NMAC History: The material in this part was derived from that previously filed with the commission of public records - state records center and archives.

EIB 73-4, Liquid Waste Disposal Regulations, filed 9/19/73.

EIB 79-7-2, Liquid Waste Disposal Regulations, filed 8/7/79.

EIB/LWDR 1, Liquid Waste Disposal Regulations, filed 10/10/85.

EIB/LWDR 2, Liquid Waste Disposal Regulations, filed 12/19/89.

History of Repealed Material: 20 NMAC 7.3, Liquid Waste Disposal (filed 10-27-95) repealed 11-30-95.
20.7.3 NMAC, Liquid Waste Disposal (filed 1/09/04) repealed 9/01/05.

Other History:

EIB/LWDR 2, Liquid Waste Disposal Regulations (filed 12/19/89) renumbered, reformatted and replaced by 20 NMAC 7.3, Liquid Waste Disposal, effective 11/30/95.

20 NMAC 7.3, Liquid Waste Disposal (filed 10/27/95) replaced by 20 NMAC 7.3, Liquid Waste Disposal, effective 10/15/97.

20 NMAC 7.3, Liquid Waste Disposal (filed 10/27/97) renumbered, reformatted, amended and replaced by 20.7.3 NMAC, Liquid Waste Disposal, effective 3/01/04.

20.7.3 NMAC, Liquid Waste Disposal (filed 1/09/04) replaced by 20.7.3 NMAC, Liquid Waste Disposal and Treatment, effective 9/01/05.